A Story of Units®

Eureka Math™

Grade 4, Module 7

Student File_A

*Contains copy-ready classwork and homework
as well as templates (including cut outs)*

Name _____   Date _____

a.

Pounds	Ounces
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

The rule for converting pounds to ounces is _____.

b.

Yards	Feet
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

The rule for converting yards to feet is
_____.

c.

Feet	Inches
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

The rule for converting feet to inches is
_____.

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Lesson 1:   Create conversion tables for length, weight, and capacity units using
measurement tools, and use the tables to solve problems.

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Name _____   Date _____

Use RDW to solve Problems 1–3.

1. Evan put a 2-pound weight on one side of the scale. How many 1-ounce
    weights will he need to put on the other side of the scale to make
    them equal?
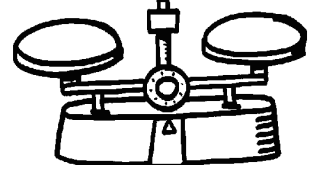
2. Julius put a 3-pound weight on one side of the scale. Abel put 35 1-ounce weights on the other side.
    How many more 1-ounce weights does Abel need to balance the scale?

3. Mrs. Upton's baby weighs 5 pounds and 4 ounces. How many total ounces does the baby weigh?

4. Complete the following conversion tables, and write the rule under each table.

    a.

Pounds	Ounces
1	
3	
7	
10	
17	

    The rule for converting pounds to ounces is _____.

EUREKA MATH   **Lesson 1:**   Create conversion tables for length, weight, and capacity units using   **2**
              measurement tools, and use the tables to solve problems.

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b.

Feet	Inches
1	
2	
5	
10	
15	

The rule for converting feet to inches is

_____ .

c.

Yards	Feet
1	
2	
4	
10	
14	

The rule for converting yards to feet is

_____ .

5. Solve.

    a. 3 feet 1 inch = _____ inches

    b. 11 feet 10 inches = _____ inches

    c. 5 yards 1 foot = _____ feet

    d. 12 yards 2 feet = _____ feet

    e. 27 pounds 10 ounces = _____ ounces

    f. 18 yards 9 feet = _____ feet

    g. 14 pounds 5 ounces = _____ ounces

    h. 5 yards 2 feet = _____ inches

6. Answer *true* or *false* for the following statements. If the statement is false, change the right side of the comparison to make it true.

    a. 2 kilograms > 2,600 grams   _____

    b. 12 feet < 140 inches   _____

    c. 10 kilometers = 10,000 meters   _____

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Lesson 1:   Create conversion tables for length, weight, and capacity units using
measurement tools, and use the tables to solve problems.

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Name _____   Date _____

1. Complete the tables.

a.

Yards	Feet
1	
2	
3	
5	
10	

b.

Feet	Inches
1	
2	
5	
10	
15	

c.

Yards	Inches
1	
3	
6	
10	
12	

2. Solve.

a. 2 yards 2 inches = _____ inches

b. 9 yards 10 inches = _____ inches

c. 4 yards 2 feet = _____ feet

d. 13 yards 1 foot = _____ feet

e. 17 feet 2 inches = _____ inches

f. 11 yards 1 foot = _____ feet

g. 15 yards 2 feet = _____ feet

h. 5 yards 2 feet = _____ inches

3. Ally has a piece of string that is 6 yards 2 feet long. How many inches of string does she have?

EUREKA MATH

Lesson 1:   Create conversion tables for length, weight, and capacity units using measurement tools, and use the tables to solve problems.

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4. Complete the table.

Pounds	Ounces
1	
2	
4	
10	
12	

5. Renee's baby sister weighs 7 pounds 2 ounces. How many ounces does her sister weigh?

6. Answer *true* or *false* for the following statements. If the statement is false, change the right side of the comparison to make it true.

   a. 4 kilograms < 4,100 grams   _____

   b. 10 yards < 360 inches   _____

   c. 10 liters = 100,000 milliliters   _____

Lesson 1: Create conversion tables for length, weight, and capacity units using measurement tools, and use the tables to solve problems.

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Name _____   Date _____

a.

Gallons	Quarts
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

The rule for converting gallons to quarts is

_____ .

b.

Quarts	Pints
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

The rule for converting quarts to pints is

_____ .

c.

Pints	Cups
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

The rule for converting pints to cups is _____ .

d.   1 gallon = _____ pints

1 quart = _____ cups

1 gallon = _____ cups

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Lesson 2:   Create conversion tables for length, weight, and capacity units using measurement tools, and use the tables to solve problems.

6

Name _____   Date _____

Use RDW to solve Problems 1–3.

1. Susie has 3 quarts of milk. How many pints does she have?

2. Kristin has 3 gallons 2 quarts of water. Alana needs the same amount of water but only has 8 quarts. How many more quarts of water does Alana need?

3. Leonard bought 4 liters of orange juice. How many milliliters of juice does he have?

4. Complete the following conversion tables and write the rule under each table.

a.

Gallons	Quarts
1	
3	
5	
10	
13	

The rule for converting gallons to quarts is

_____.

b.

Quarts	Pints
1	
2	
6	
10	
16	

The rule for converting quarts to pints is

_____.

5. Solve.

   a. 8 gallons 2 quarts = _____ quarts

   b. 15 gallons 2 quarts = _____ quarts

   c. 8 quarts 2 pints = _____ pints

   d. 12 quarts 3 pints = _____ cups

   e. 26 gallons 3 quarts = _____ pints

   f. 32 gallons 2 quarts = _____ cups

6. Answer true or false for the following statements. If your answer is false, make the statement true.

   a. 1 gallon > 4 quarts _____

   b. 5 liters = 5,000 milliliters _____

   c. 15 pints < 1 gallon 1 cup _____

7. Russell has 5 liters of a certain medicine. If it takes 2 milliliters to make 1 dose, how many doses can he make?

8. Each month, the Moore family drinks 16 gallons of milk and the Siler family goes through 44 quarts of milk. Which family drinks more milk each month?

9. Keith's lemonade stand served lemonade in glasses with a capacity of 1 cup. If he had 9 gallons of lemonade, how many cups could he sell?

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Lesson 2: Create conversion tables for length, weight, and capacity units using measurement tools, and use the tables to solve problems.

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Name _____   Date _____

Use the RDW process to solve Problems 1–3.

1. Dawn needs to pour 3 gallons of water into her fish tank. She only has a 1-cup measuring cup. How many cups of water should she put in the tank?

2. Julia has 4 gallons 2 quarts of water. Ally needs the same amount of water but only has 12 quarts. How much more water does Ally need?

3. Sean drank 2 liters of water today, which was 280 milliliters more than he drank yesterday. How much water did he drink yesterday?

4. Complete the tables.

    a.

Gallons	Quarts
1	
2	
4	
12	
15	

    b.

Quarts	Pints
1	
2	
6	
10	
16	

EUREKA MATH™   Lesson 2:   Create conversion tables for length, weight, and capacity units using measurement tools, and use the tables to solve problems.   **9**

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5. Solve.

    a. 6 gallons 3 quarts = _____ quarts

    b. 12 gallons 2 quarts = _____ quarts

    c. 5 quarts 1 pint = _____ pints

    d. 13 quarts 3 pints = _____ cups

    e. 17 gallons 2 quarts = _____ pints

    f. 27 gallons 3 quarts = _____ cups

6. Explain how you solved Problem 5(f).

7. Answer true or false for the following statements. If your answer is false, make the statement true by correcting the right side of the comparison.

    a. 2 quarts > 10 pints   _____

    b. 6 liters = 6,000 milliliters   _____

    c. 16 cups < 4 quarts 1 cup   _____

8. Joey needs to buy 3 quarts of chocolate milk. The store only sells it in pint containers. How many pints of chocolate milk should he buy? Explain how you know.

9. Granny Smith made punch. She used 2 pints of ginger ale, 3 pints of fruit punch, and 1 pint of orange juice. She served the punch in glasses that had a capacity of 1 cup. How many cups can she fill?

Lesson 2: Create conversion tables for length, weight, and capacity units using measurement tools, and use the tables to solve problems.

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Name _____   Date _____

a.

Minutes	Seconds
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

The rule for converting minutes to seconds is

_____ .

b.

Hours	Minutes
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

The rule for converting hours to minutes is

_____ .

c.

Days	Hours
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	

The rule for converting days to hours is

_____ .

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Lesson 3:   Create conversion tables for units of time, and use the tables to solve problems.

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Name _____ Date _____

Use RDW to solve Problems 1–2.

1. Courtney needs to leave the house by 8:00 a.m. If she wakes up at 6:00 a.m., how many minutes does she have to get ready? Use the number line to show your work.

2. Giuliana's goal was to run a marathon in under 6 hours. What was her goal in minutes?

3. Complete the following conversion tables and write the rule under each table.

a.

Hours	Minutes
1	
3	
6	
10	
15	

The rule for converting hours to minutes and minutes to seconds is

_____.

b.

Days	Hours
1	
2	
5	
7	
10	

The rule for converting days to hours is

_____.

Lesson 3: Create conversion tables for units of time, and use the tables to solve problems.

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4.   Solve.

   a.   9 hours 30 minutes = _____ minutes

   b.   7 minutes 45 seconds = _____ seconds

   c.   9 days 20 hours = _____ hours

   d.   22 minutes 27 seconds = _____ seconds

   e.   13 days 19 hours = _____ hours

   f.   23 hours 5 minutes = _____ minutes

5.   Explain how you solved Problem 4(f).

6.   How many seconds are in 14 minutes 43 seconds?

7.   How many hours are there in 4 weeks 3 days?

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Lesson 3:   Create conversion tables for units of time, and use the tables to solve problems.

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Name _____   Date _____

Use RDW to solve Problems 1–2.

1. Jeffrey practiced his drums from 4:00 p.m. until 7:00 p.m. How many minutes did he practice? Use the number line to show your work.
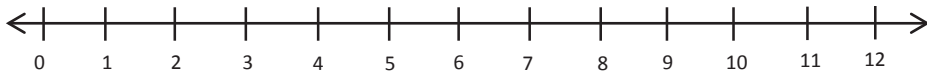
2. Isla used her computer for 5 hours over the weekend. How many minutes did she spend on the computer?

3. Complete the following conversion tables and write the rule under each table.

a.

Hours	Minutes
1	
2	
5	
9	
12	

b.

Days	Hours
1	
3	
6	
8	
20	

The rule for converting hours to minutes is

_____.

The rule for converting days to hours is

_____.

Lesson 3:   Create conversion tables for units of time, and use the tables to solve problems.

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4. Solve.

    a.   10 hours 30 minutes = _____ minutes

    b.   6 minutes 15 seconds = _____ seconds

    c.   4 days 20 hours = _____ hours

    d.   3 minutes 45 seconds = _____ seconds

    e.   23 days 21 hours = _____ hours

    f.   17 hours 5 minutes = _____ minutes

5. Explain how you solved Problem 4(f).

6. It took a space shuttle 8 minutes 36 seconds to launch and reach outer space. How many seconds did it take?

7. Apollo 16's mission lasted just over 1 week 4 days. How many hours are there in 1 week 4 days?

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Lesson 3:   Create conversion tables for units of time, and use the tables to solve problems.

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Name _____   Date _____

Use RDW to solve the following problems.

1. Beth is allowed 2 hours of TV time each week. Her sister is allowed 2 times as much. How many minutes of TV can Beth's sister watch?

2. Clay weighs 9 times as much as his baby sister. Clay weighs 63 pounds. How much does his baby sister weigh in ounces?

3. Helen has 4 yards of rope. Daniel has 4 times as much rope as Helen. How many more feet of rope does Daniel have compared to Helen?

Lesson 4:   Solve multiplicative comparison word problems using measurement conversion tables.

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4.   A dishwasher uses 11 liters of water for each cycle. A washing machine uses 5 times as much water as a dishwasher uses for each load. Combined, how many milliliters of water are used for 1 cycle of each machine?

5.   Joyce bought 2 pounds of apples. She bought 3 times as many pounds of potatoes as pounds of apples. The melons she bought were 10 ounces lighter than the total weight of the potatoes. How many ounces did the melons weigh?

Lesson 4:   Solve multiplicative comparison word problems using measurement   **17**
                  conversion tables.

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Name _____   Date _____

Use RDW to solve the following problems.

1. Sandy took the train to New York City. The trip took 3 hours. Jackie took the bus, which took twice as long. How many minutes did Jackie's trip take?

2. Coleton's puppy weighed 3 pounds 8 ounces at birth. The vet weighed the puppy again at 6 months, and the puppy weighed 7 pounds. How many ounces did the puppy gain?

3. Jessie bought a 2-liter bottle of juice. Her sister drank 650 milliliters. How many milliliters were left in the bottle?

Lesson 4:   Solve multiplicative comparison word problems using measurement conversion tables.

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4. Hudson has a chain that is 1 yard in length. Myah's chain is 3 times as long. How many feet of chain do they have in all?

5. A box weighs 8 ounces. A shipment of boxes weighs 7 pounds. How many boxes are in the shipment?

6. Tracy's rain barrel has a capacity of 27 quarts of water. Beth's rain barrel has a capacity of twice the amount of water as Tracy's rain barrel. Trevor's rain barrel can hold 9 quarts of water less than Beth's barrel.

   a. What is the capacity of Trevor's rain barrel?

   b. If Tracy, Beth, and Trevor's rain barrels were filled to capacity, and they poured all of the water into a 30-gallon bucket, would there be enough room? Explain.

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Lesson 4:   Solve multiplicative comparison word problems using measurement conversion tables.

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Name _____ Date _____

1. a. Label the rest of the tape diagram below. Solve for the unknown.

3 feet

?

5 inches
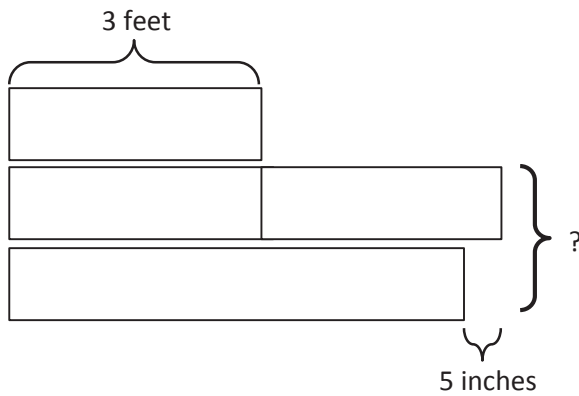
   b. Write a problem of your own that could be solved using the diagram above.

2. Create a problem of your own using the diagram below, and solve for the unknown.

4 pounds

?

30 ounces

Name _____   Date _____

Draw a tape diagram to solve the following problems.

1. Timmy drank 2 quarts of water yesterday. He drank twice as much water today as he drank yesterday. How many cups of water did Timmy drink in the two days?

2. Lisa recorded a 2-hour television show. When she watched it, she skipped the commercials. It took her 84 minutes to watch the show. How many minutes did she save by skipping the commercials?

3. Jason bought 2 pounds of cashews. Sarah ate 9 ounces. David ate 2 ounces more than Sarah. How many ounces were left in Jason's bag of cashews?

4. a. Label the rest of the tape diagram below. Solve for the unknown.

5 feet

?

10 in.

b. Write a problem of your own that could be solved using the diagram above.

5. Create a problem of your own using the diagram below, and solve for the unknown.

3 pounds

?

8 ounces

Classmate:		Problem Number:	
Strategies my classmate used:			
Things my classmate did well:			
Suggestions for improvement:			
Changes I would make to my work based on my classmate's work:			

Classmate:		Problem Number:	
Strategies my classmate used:			
Things my classmate did well:			
Suggestions for improvement:			
Changes I would make to my work based on my classmate's work:			

peer share and critique form

Name _____   Date _____

1. Determine the following sums and differences. Show your work.

   a. 3 qt + 1 qt = _____ gal

   b. 2 gal 1 qt + 3 qt = _____ gal

   c. 1 gal − 1 qt = _____ qt

   d. 5 gal − 1 qt = _____ gal _____ qt

   e. 2 c + 2 c = _____ qt

   f. 1 qt 1 pt + 3 pt = _____ qt

   g. 2 qt − 3 pt = _____ pt

   h. 5 qt − 3 c _____ qt _____ c

2. Find the following sums and differences. Show your work.

   a. 6 gal 3 qt + 3 qt = _____ gal _____ qt

   b. 10 gal 3 qt + 3 gal 3 qt = _____ gal _____ qt

   c. 9 gal 1 pt − 2 pt = _____ gal _____ pt

   d. 7 gal 1 pt − 2 gal 7 pt = _____ gal _____ pt

   e. 16 qt 2 c + 4 c = _____ qt _____ c

   f. 6 gal 5 pt + 3 gal 3 pt = _____ gal _____ pt

3. The capacity of a pitcher is 3 quarts. Right now, it contains 1 quart 3 cups of liquid. How much more liquid can the pitcher hold?

4. Dorothy follows the recipe in the table to make her grandma's cherry lemonade.

    a. How much lemonade does the recipe make?

Cherry Lemonade	
Ingredient	**Amount**
Lemon Juice	5 pints
Sugar Syrup	2 cups
Water	1 gallon 1 quart
Cherry Juice	3 quarts

    b. How many more cups of water could Dorothy add to the recipe to make an exact number of gallons of lemonade?

Name _____   Date _____

1. Determine the following sums and differences. Show your work.

    a.   5 qt + 3 qt = _____ gal

    b.   1 gal 2 qt + 2 qt = _____ gal

    c.   1 gal – 3 qt = _____ qt

    d.   3 gal – 2 qt = _____ gal _____ qt

    e.   1 c + 3 c = _____ qt

    f.   2 qt 3 c + 5 c = _____ qt

    g.   1 qt – 1 pt = _____ pt

    h.   6 qt – 5 pt = _____ qt _____ pt

2. Find the following sums and differences. Show your work.

    a.   4 gal 2 qt + 3 qt = _____ gal _____ qt

    b.   12 gal 2 qt + 5 gal 3 qt = _____ gal _____ qt

    c.   7 gal 2 pt – 3 pt = _____ gal _____ pt

    d.   11 gal 3 pt – 4 gal 6 pt = _____ gal _____ pt

    e.   12 qt 5 c + 6 c = _____ qt _____ c

    f.   8 gal 6 pt + 5 gal 4 pt = _____ gal _____ pt

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3. The capacity of a bucket is 5 gallons. Right now, it contains 3 gallons 2 quarts of liquid. How much more liquid can the bucket hold?

4. Grace and Joyce follow the recipe in the table to make a homemade bubble solution.

   a. How much solution does the recipe make?

Homemade Bubble Solution	
Ingredient	**Amount**
Water	2 gallons 3 pints
Dish Soap	2 quarts 1 cup
Corn Syrup	2 cups

   b. How many more cups of solution would they need to fill a 4-gallon container?

Name _____ Date _____

1. Determine the following sums and differences. Show your work.

   a. 1 ft + 2 ft = _____ yd

   b. 3 yd 1 ft + 2 ft = _____ yd

   c. 1 yd − 1 ft = _____ ft

   d. 8 yd − 1 ft = _____ yd _____ ft

   e. 3 in + 9 in = _____ ft

   f. 6 in + 9 in = _____ ft _____ in

   g. 1 ft − 8 in = _____ in

   h. 5 ft − 8 in = _____ ft _____ in

2. Find the following sums and differences. Show your work.

   a. 5 yd 2 ft + 2 ft = _____ yd _____ ft

   b. 7 yd 2 ft + 2 yd 2 ft = _____ yd _____ ft

   c. 4 yd 1 ft − 2 ft = _____ yd _____ ft

   d. 6 yd 1 ft − 2 yd 2 ft = _____ yd _____ ft

   e. 6 ft 9 in + 4 in = _____ ft _____ in

   f. 4 ft 4 in + 3 ft 11 in = _____ ft _____ in

   g. 34 ft 4 in − 8 in = _____ ft _____ in

   h. 7 ft 1 in − 5 ft 10 in = _____ ft _____ in

3. Matthew is 6 feet 2 inches tall. His little cousin Emma is 3 feet 6 inches tall. How much taller is Matthew than Emma?

4. In gym class, Jared climbed 10 feet 4 inches up a rope. Then, he continued to climb up another 3 feet 9 inches. How high did Jared climb?

5. A quadrilateral has a perimeter of 18 feet 2 inches. The sum of three of the sides is 12 feet 4 inches.

    a. What is the length of the fourth side?

    b. An equilateral triangle has a side length equal to the fourth side of the quadrilateral. What is the perimeter of the triangle?

Name _____   Date _____

1. Determine the following sums and differences. Show your work.

    a. 2 yd 2 ft + 1 ft = _____ yd

    b. 2 yd − 1 ft = _____ yd _____ ft

    b. 2 ft + 2 ft = _____ yd _____ ft

    d. 5 yd − 1 ft = _____ yd _____ ft

    e. 7 in + 5 in = _____ ft

    f. 7 in + 7 in = _____ ft _____ in

    g. 1 ft − 2 in = _____ in

    h. 2 ft − 6 in = _____ ft _____ in

2. Find the following sums and differences. Show your work.

    a. 4 yd 2 ft + 2 ft = _____ yd _____ ft

    b. 6 yd 2 ft + 1 yd 1 ft = _____ yd _____ ft

    c. 5 yd 1 ft − 2 ft = _____ yd _____ ft

    d. 7 yd 1 ft − 5 yd 2 ft = _____ yd _____ ft

    e. 7 ft 8 in + 5 in = _____ ft _____ in

    f. 6 ft 5 in + 5 ft 9 in = _____ ft _____ in

    g. 32 ft 3 in − 7 in = _____ ft _____ in

    h. 8 ft 2 in − 3 ft 11 in = _____ ft _____ in

3. Laurie bought 9 feet 5 inches of blue ribbon. She also bought 6 feet 4 inches of green ribbon. How much ribbon did she buy altogether?

4. The length of the room is 11 feet 6 inches. The width of the room is 2 feet 9 inches shorter than the length. What is the width of the room?

5. Tim's bedroom is 12 feet 6 inches wide. The perimeter of the rectangular-shaped bedroom is 50 feet.

    a. What is the length of Tim's bedroom?

    b. How much longer is the length of Tim's room than the width?

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Name _____   Date _____

1. Determine the following sums and differences. Show your work.

   a.   7 oz + 9 oz = _____ lb

   b.   1 lb 5 oz + 11 oz = _____ lb

   c.   1 lb – 13 oz = _____ oz

   d.   12 lb – 4 oz = _____ lb _____ oz

   e.   3 lb 9 oz + 9 oz = _____ lb _____ oz

   f.   30 lb 9 oz + 9 lb 9 oz _____ lb _____ oz

   g.   25 lb 2 oz – 14 oz = _____ lb _____ oz

   h.   125 lb 2 oz – 12 lb 3 oz = _____ lb _____ oz

2. The total weight of Sarah and Amanda's full backpacks is 27 pounds. Sarah's backpack weighs 15 pounds 9 ounces. How much does Amanda's backpack weigh?

3. In Emma's supply box, a pencil weighs 3 ounces. Her scissors weigh 3 ounces more than the pencil, and a bottle of glue weighs three times as much as the scissors. How much does the bottle of glue weigh in pounds and ounces?

4. Use the information in the chart about Jodi's school supplies to answer the following questions:

    a. On Mondays, Jodi packs only her laptop and supply case into her backpack. How much does her full backpack weigh?

Textbook	Supply Case	Binder
3 lb 8 oz	1 lb	2 lb 5 oz
Laptop	Notebook	Backpack (empty)
5 lb 12 oz	11 oz	2 lb 14 oz

    b. On Tuesdays, Jodi brings her laptop, supply case, two notebooks, and two textbooks in her backpack. On Fridays, Jodi only packs her binder and supply case. How much less does Jodi's full backpack weigh on Friday than it does on Tuesday?

Name _____   Date _____

1. Determine the following sums and differences. Show your work.

   a. 11 oz + 5 oz = _____ lb   b. 1 lb 7 oz + 9 oz = _____ lb

   c. 1 lb – 11 oz = _____ oz   d. 12 lb – 8 oz = _____ lb _____ oz

   e. 5 lb 8 oz + 9 oz = _____ lb _____ oz   f. 21 lb 8 oz + 6 lb 9 oz = _____ lb _____ oz

   g. 23 lb 1 oz – 15 oz = _____ lb _____ oz   h. 89 lb 2 oz – 16 lb 4 oz = _____ lb _____ oz

2. When David took his dog, Rocky, to the vet in December, Rocky weighed 29 pounds 9 ounces. When he took Rocky back to the vet in March, Rocky weighed 34 pounds 4 ounces. How much weight did Rocky gain?

3. Bianca had 6 identical jars of bubble bath. She put them all in a bag that weighed 2 ounces. The total weight of the bag filled with the six jars was 1 pound 4 ounces. How much did each jar weigh?

4. Use the information in the chart about Melissa's school supplies to answer the following questions:

a. On Wednesdays, Melissa packs only two notebooks and a binder into her backpack. How much does her full backpack weigh on Wednesdays?

Textbook 3 lb 8 oz	Supply Case 1 lb	Binder 2 lb 5 oz
Laptop 5 lb 12 oz	Notebook 11 oz	Backpack (empty) 2 lb 14 oz

b. On Thursdays, Melissa puts her laptop, supply case, two textbooks, and a notebook in her backpack. How much does her full backpack weigh on Thursdays?

c. How much more does the backpack weigh with 3 textbooks and a notebook than it does with just 1 textbook and the supply case?

Name _____   Date _____

1. Determine the following sums and differences. Show your work.

   a. 23 min + 37 min = _____ hr

   b. 1 hr 11 min + 49 min = _____ hr

   c. 1 hr – 12 min = _____ min

   d. 4 hr – 12 min = _____ hr _____ min

   e. 22 sec + 38 sec = _____ min

   f. 3 min – 45 sec = _____ min _____ sec

2. Find the following sums and differences. Show your work.

   a. 3 hr 45 min + 25 min = _____ hr _____ min

   b. 2 hr 45 min + 6 hr 25 min = _____ hr _____ min

   c. 3 hr 7 min – 42 min = _____ hr _____ min

   d. 5 hr 7 min – 2 hr 13 min = _____ hr _____ min

   e. 5 min 40 sec + 27 sec = _____ min _____ sec

   f. 22 min 48 sec – 5 min 58 sec = _____ min _____ sec

3. At the cup-stacking competition, the first place finishing time was 1 minute 52 seconds. That was 31 seconds faster than the second place finisher. What was the second place time?

4. Jackeline and Raychel have 5 hours to watch three movies that last 1 hour 22 minutes, 2 hours 12 minutes, and 1 hour 57 minutes, respectively.

   a. Do the girls have enough time to watch all three movies? Explain why or why not.

   b. If Jackeline and Raychel decide to watch only the two longest movies and take a 30-minute break in between, how much of their 5 hours will they have left over?

Name _____   Date _____

1. Determine the following sums and differences. Show your work.

    a.   41 min + 19 min = _____ hr

    b.   2 hr 21 min + 39 min = _____ hr

    c.   1 hr – 33 min = _____ min

    d.   3 hr – 33 min = _____ hr _____ min

    e.   31 sec + 29 sec = _____ min

    f.   5 min – 15 sec = _____ min _____ sec

2. Find the following sums and differences. Show your work.

    a.   5 hr 30 min + 35 min = _____ hr _____ min

    b.   3 hr 15 min + 5 hr 55 min = _____ hr_____ min

    c.   4 hr 4 min – 38 min = _____ hr _____ min

    d.   7 hr 3 min – 4 hr 25 min = _____ hr _____ min

    e.   3 min 20 sec + 49 sec = _____ min _____ sec

    f.   22 min 37 sec – 5 min 58 sec = _____ min _____ sec

3. It took 5 minutes 34 seconds for Melissa's oven to preheat to 350 degrees. That was 27 seconds slower than it took Ryan's oven to preheat to the same temperature. How long did it take Ryan's oven to preheat?

4. Joanna read three books. Her goal was to finish all three books in a total of 7 hours. She completed them, respectively, in 2 hours 37 minutes, 3 hours 9 minutes, and 1 hour 51 minutes.

    a. Did Joanna meet her goal? Write a statement to explain why or why not.

    b. Joanna completed the two shortest books in one evening. How long did she spend reading that evening? How long, with her goal in mind, did that leave her to read the third book?

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Name _____   Date _____

Use RDW to solve the following problems.

1. Paula's time swimming in the Ironman Triathlon was 1 hour 25 minutes. Her time biking was 5 hours longer than her swimming time. She ran for 4 hours 50 minutes. How long did it take her to complete all three parts of the race?

2. Nolan put 7 gallons 3 quarts of gas into his car on Monday and twice as much on Saturday. What was the total amount of gas put into the car on both days?

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3. One pumpkin weighs 7 pounds 12 ounces. A second pumpkin weighs 10 pounds 4 ounces. A third pumpkin weighs 2 pounds 9 ounces more than the second pumpkin. What is the total weight of all three pumpkins?

4. Mr. Lane is 6 feet 4 inches tall. His daughter, Mary, is 3 feet 8 inches shorter than her father. His son is 9 inches taller than Mary. How many inches taller is Mr. Lane than his son?

Name _____   Date _____

Use RDW to solve the following problems.

1. On Saturday, Jeff used 2 quarts 1 cup of water from a full gallon to replace some water that leaked from his fish tank. On Sunday, he used 3 pints of water from the same gallon. How much water was left in the gallon after Sunday?

2. To make punch, Julia poured 1 quart 3 cups of ginger ale into a bowl and then added twice as much fruit juice. How much punch did she make in all?

3. Patti went swimming for 1 hour 15 minutes on Monday. On Tuesday, she swam twice as long as she swam on Monday. On Wednesday, she swam 50 minutes less than the time she swam on Tuesday. How much time did she spend swimming during that three-day period?

4. Myah is 4 feet 2 inches tall. Her sister, Ally, is 10 inches taller. Their little brother is half as tall as Ally. How tall is their little brother in feet and inches?

5. Rick and Laurie have three dogs. Diesel weighs 89 pounds 12 ounces. Ebony weighs 33 pounds 14 ounces less than Diesel. Luna is the smallest at 10 pounds 2 ounces. What is the combined weight of the three dogs in pounds and ounces?

Name _____   Date _____

Use RDW to solve the following problems.

1. Lauren ran a marathon and finished 1 hour 15 minutes after Amy, who had a time of 2 hours 20 minutes. Cassie finished 35 minutes after Lauren. How long did it take Cassie to run the marathon?

2. Chef Joe has 8 lb 4 oz of ground beef in his freezer. This is $\frac{1}{3}$ of the amount needed to make the number of burgers he planned for a party. If he uses 4 oz of beef for each burger, how many burgers is he planning to make?

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3. Sarah read for 1 hour 17 minutes each day for 6 days. If she took 3 minutes to read each page, how many pages did she read in 6 days?

4. Grades 3, 4, and 5 have their annual field day together. Each grade level is given 16 gallons of water. If there are a total of 350 students, will there be enough water for each student to have 2 cups?

Name _____   Date _____

Use RDW to solve the following problems.

1. Ashley ran a marathon and finished 1 hour 40 minutes after P.J., who had a time of 2 hours 15 minutes. Kerry finished 12 minutes before Ashley. How long did it take Kerry to run the marathon?

2. Mr. Foote's deck is 12 ft 6 in wide. Its length is twice the width plus 3 more inches. How long is the deck?

3. Mrs. Lorentz bought 12 pounds 8 ounces of sugar. This is $\frac{1}{4}$ of the sugar she will use to make sugar cookies in her bakery this week. If she uses 10 ounces of sugar for each batch of sugar cookies, how many batches of sugar cookies will she make in a week?

4. Beth Ann practiced piano for 1 hour 5 minutes each day for 1 week. She had 5 songs to practice and spent the same amount of time practicing each song. How long did she practice each song during the week?

5. The concession stand has 18 gallons of punch. If there are a total of 240 students who want to purchase 1 cup of punch each, will there be enough punch for everyone?

Name _____   Date _____

1. Draw a tape diagram to show 1 yard divided into 3 equal parts.

    a. $\frac{1}{3}$ yd = _____ ft

    b. $\frac{2}{3}$ yd = _____ ft

    c. $\frac{3}{3}$ yd = _____ ft

2. Draw a tape diagram to show $2\frac{2}{3}$ yards = 8 feet.

3. Draw a tape diagram to show $\frac{3}{4}$ gallon = 3 quarts.

4. Draw a tape diagram to show $3\frac{3}{4}$ gallons = 15 quarts.

5. Solve the problems using whatever tool works best for you.

    a. $\frac{1}{12}$ ft = _____ in

    1 foot

    b. $\frac{}{12}$ ft = $\frac{1}{2}$ ft = _____ in

    c. $\frac{}{12}$ ft = $\frac{1}{4}$ ft = _____ in

    0 1 2 3 4 5 6 7 8 9 10 11 12

    inches

Lesson 12:   Use measurement tools to convert mixed number measurements to smaller units.

d. $\dfrac{}{12}$ ft = $\dfrac{3}{4}$ ft = _____ in

e. $\dfrac{}{12}$ ft = $\dfrac{1}{3}$ ft = _____ in

f. $\dfrac{}{12}$ ft = $\dfrac{2}{3}$ ft = _____ in

6. Solve.

a. $1\dfrac{1}{3}$ yd = _____ ft	b. $4\dfrac{2}{3}$ yd = _____ ft
c. $2\dfrac{1}{2}$ gal = _____ qt	d. $7\dfrac{3}{4}$ gal = _____ qt
e. $1\dfrac{1}{2}$ ft = _____ in	f. $6\dfrac{1}{2}$ ft = _____ in
g. $1\dfrac{1}{4}$ ft = _____ in	h. $6\dfrac{1}{4}$ ft = _____ in

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Lesson 12: Use measurement tools to convert mixed number measurements to smaller units.
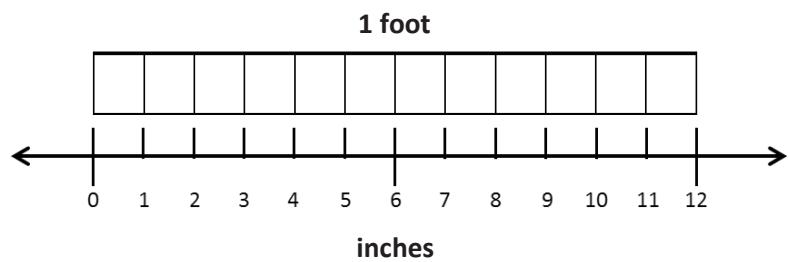
49

Name _____   Date _____

1. Draw a tape diagram to show $1\frac{1}{3}$ yards = 4 feet.

2. Draw a tape diagram to show $\frac{1}{2}$ gallon = 2 quarts.

3. Draw a tape diagram to show $1\frac{3}{4}$ gallons = 7 quarts.

4. Solve the problems using whatever tool works best for you.

    a. $\frac{1}{2}$ foot = _____ inches

    b. $\frac{}{12}$ foot = $\frac{1}{4}$ foot = _____ inches

    c. $\frac{}{12}$ foot = $\frac{1}{6}$ foot = _____ inches

    d. $\frac{}{12}$ foot = $\frac{1}{3}$ foot = _____ inches

    e. $\frac{}{12}$ foot = $\frac{2}{3}$ foot = _____ inches

    f. $\frac{}{12}$ foot = $\frac{5}{6}$ foot = _____ inches

1 foot

0   1   2   3   4   5   6   7   8   9   10   11   12

inches

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Lesson 12: Use measurement tools to convert mixed number measurements to smaller units.

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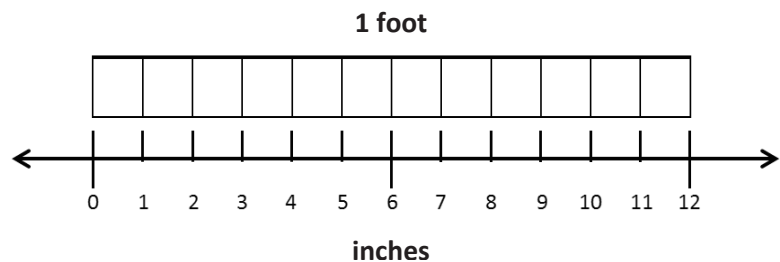
5. Solve.

a. $2\frac{2}{3}$ yd = _____ ft	b. $3\frac{1}{3}$ yd = _____ ft
c. $3\frac{1}{2}$ gal = _____ qt	d. $5\frac{1}{4}$ gal = _____ qt
e. $6\frac{1}{4}$ ft = _____ in	f. $7\frac{1}{3}$ ft = _____ in
g. $2\frac{1}{2}$ ft = _____ in	h. $5\frac{3}{4}$ ft = _____ in
i. $9\frac{2}{3}$ ft = _____ in	j. $7\frac{5}{6}$ ft = _____ in

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Lesson 12: Use measurement tools to convert mixed number measurements to smaller units.

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Name _____　Date _____

1. Solve.

    a. $\frac{1}{16}$ pound = _____ ounce

    b. $\frac{}{16}$ pound = $\frac{1}{2}$ pound = _____ ounces

    c. $\frac{}{16}$ pound = $\frac{1}{4}$ pound = _____ ounces

    d. $\frac{}{16}$ pound = $\frac{3}{4}$ pound = _____ ounces

    e. $\frac{}{16}$ pound = $\frac{1}{8}$ pound = _____ ounces

    f. $\frac{}{16}$ pound = $\frac{3}{8}$ pound = _____ ounces

    ounces

    0　1　2　3　4　5　6　7　8　9　10　11　12　13　14　15　16

2. Draw a tape diagram to show $2\frac{1}{2}$ pounds = 40 ounces.

3.

    1 hour

    0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

    minutes

    a. $\frac{1}{60}$ hour = _____ minute

    b. $\frac{}{60}$ hour = $\frac{1}{2}$ hour = _____ minutes

    c. $\frac{}{60}$ hour = $\frac{1}{4}$ hour = _____ minutes

4. Draw a tape diagram to show that $1\frac{1}{2}$ hours = 90 minutes.

EUREKA MATH™　　**Lesson 13:**　Use measurement tools to convert mixed number measurements to smaller units.　　**52**

5. Solve.

a. $1\frac{1}{8}$ pounds = _____ ounces	b. $3\frac{3}{8}$ pounds = _____ ounces
c. $5\frac{3}{4}$ lb = _____ oz	d. $5\frac{1}{2}$ lb = _____ oz
e. $1\frac{1}{4}$ hours = _____ minutes	f. $3\frac{1}{2}$ hours = _____ minutes
g. $2\frac{1}{4}$ hr = _____ min	h. $5\frac{1}{2}$ hr = _____ min
i. $3\frac{1}{3}$ yards = _____ feet	j. $7\frac{2}{3}$ yd = _____ ft
k. $4\frac{1}{2}$ gallons = _____ quarts	l. $6\frac{3}{4}$ gal = _____ qt
m. $5\frac{3}{4}$ feet = _____ inches	n. $8\frac{1}{3}$ ft = _____ in

Name _____   Date _____

1. Solve.

   a. $\frac{1}{16}$ pound = _____ ounce

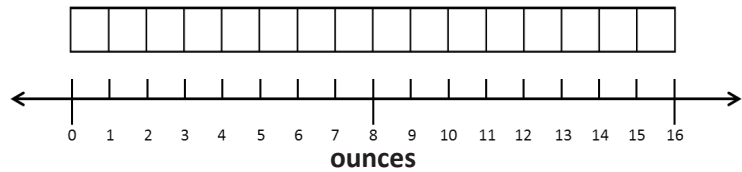   b. $\frac{}{16}$ pound = $\frac{1}{2}$ pound = _____ ounces

   c. $\frac{}{16}$ pound = $\frac{1}{4}$ pound = _____ ounces
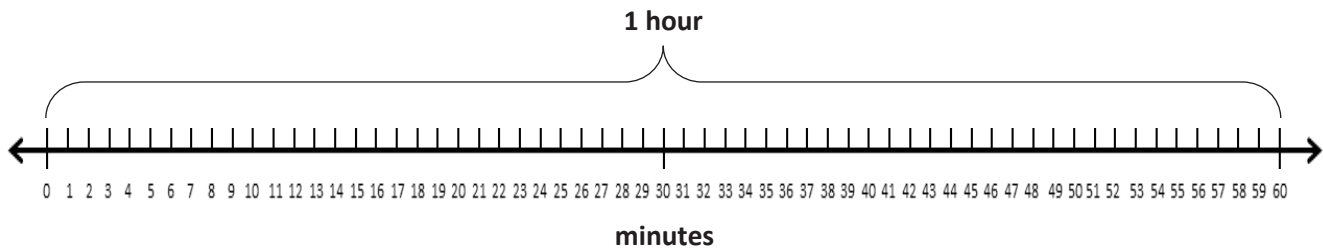
   d. $\frac{}{16}$ pound = $\frac{3}{4}$ pound = _____ ounces

   e. $\frac{}{16}$ pound = $\frac{1}{8}$ pound = _____ ounces

   f. $\frac{}{16}$ pound = $\frac{5}{8}$ pound = _____ ounces
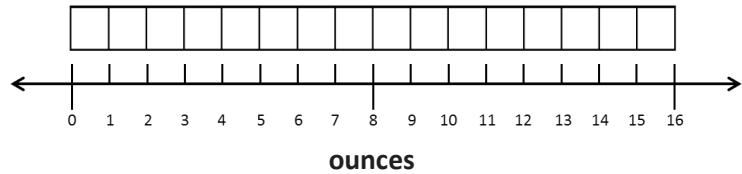
   ounces

2. Draw a tape diagram to show $1\frac{1}{4}$ pounds = 20 ounces.

3. Solve.

   1 hour

   0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60

   minutes

   a. $\frac{1}{60}$ hour = _____ minute

   b. $\frac{}{60}$ hour = $\frac{1}{2}$ hour = _____ minutes

   c. $\frac{}{60}$ hour = $\frac{1}{4}$ hour = _____ minutes

   d. $\frac{}{60}$ hour = $\frac{1}{3}$ hour = _____ minutes

4. Draw a tape diagram to show that $2\frac{1}{4}$ hours = 135 minutes.

Lesson 13:   Use measurement tools to convert mixed number measurements to smaller units.

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5. Solve.

a. $2\frac{1}{4}$ pounds = _____ ounces	b. $4\frac{7}{8}$ pounds = _____ ounces
c. $6\frac{3}{4}$ lb = _____ oz	d. $4\frac{1}{8}$ lb = _____ oz
e. $1\frac{3}{4}$ hours = _____ minutes	f. $4\frac{1}{2}$ hours = _____ minutes
g. $3\frac{3}{4}$ hr = _____ min	h. $5\frac{1}{3}$ hr = _____ min
i. $4\frac{2}{3}$ yards = _____ feet	j. $6\frac{1}{3}$ yd = _____ ft
k. $4\frac{1}{4}$ gallons = _____ quarts	l. $2\frac{3}{4}$ gal = _____ qt
m. $6\frac{1}{4}$ feet = _____ inches	n. $9\frac{5}{6}$ ft = _____ in

Name _____   Date _____

Use RDW to solve the following problems.

1. A cartoon lasts $\frac{1}{2}$ hour. A movie is 6 times as long as the cartoon. How many minutes does it take to watch both the cartoon and the movie?

2. A large bench is $7\frac{1}{6}$ feet long. It is 17 inches longer than a shorter bench. How many inches long is the shorter bench?

3. The first container holds 4 gallons 2 quarts of juice. The second container can hold $1\frac{3}{4}$ gallons more than the first container. Altogether, how much juice can the two containers hold?

Lesson 14:   Solve multi-step word problems involving converting mixed number measurements to a single unit.

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4. A girl's height is $3\frac{1}{3}$ feet. A giraffe's height is 3 times that of the girl's. How many inches taller is the giraffe than the girl?

5. Five ounces of pretzels are put into each bag. How many bags can be made from $22\frac{3}{4}$ pounds of pretzels?

6. Twenty servings of pancakes require 15 ounces of pancake mix.

    a. How much pancake mix is needed for 120 servings?

    b. Extension: The mix is bought in $2\frac{1}{2}$-pound bags. How many bags will be needed to make 120 servings?

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Name _____   Date _____

Use RDW to solve the following problems.

1. Molly baked a pie for 1 hour and 45 minutes. Then, she baked banana bread for 35 minutes less than the pie. How many minutes did it take to bake the pie and the bread?

2. A slide on the playground is $12\frac{1}{2}$ feet long. It is 3 feet 7 inches longer than the small slide. How long is the small slide?

3. The fish tank holds 8 gallons 2 quarts of water. Jeffrey poured $1\frac{3}{4}$ gallons into the empty tank. How much more water does he still need to pour into the tank to fill it?

Lesson 14: Solve multi-step word problems involving converting mixed number measurements to a single unit.

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4. The candy shop puts 10 ounces of gummy bears in each box. How many boxes do they need to fill if there are $21\frac{1}{4}$ pounds of gummy bears?

5. Mom can make 10 brownies from a 12-ounce package.

   a. How many ounces of brownie mix would be needed to make 50 brownies?

   b. Extension: The brownie mix is also sold in $1\frac{1}{2}$-pound bags. How many bags would be needed to make 120 brownies?

Lesson 14: Solve multi-step word problems involving converting mixed number measurements to a single unit.

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Name _____   Date _____

1. Emma's rectangular bedroom is 11 ft long and 12 ft wide with an attached closet that is 4 ft by 5 ft. How many square feet of carpet does Emma need to cover both the bedroom and closet?

2. To save money, Emma is no longer going to carpet her closet. In addition, she wants one 3 ft by 6 ft corner of her bedroom to be wood floor. How many square feet of carpet will she need for the bedroom now?

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3. Find the area of the figure pictured to the right.
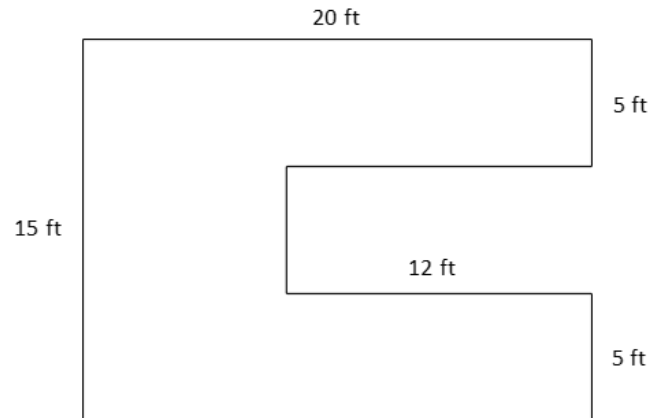
4. Label the sides of the figure below with measurements that make sense. Find the area of the figure.
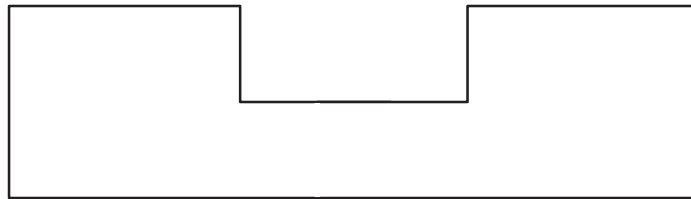
5. Peterkin Park has a square fountain with a walkway around it. The fountain measures 12 feet on each side. The walkway is $3\frac{1}{2}$ feet wide. Find the area of the walkway.

6. If 1 bag of gravel covers 9 square feet, how many bags of gravel will be needed to cover the entire walkway around the fountain in Peterkin Park?

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Lesson 15:   Create and determine the area of composite figures.

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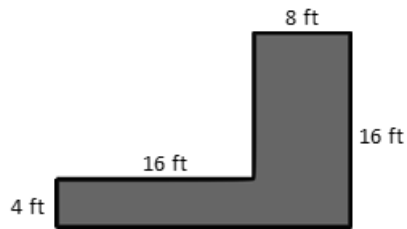G4-M7-SE-1.3.0-09.2015
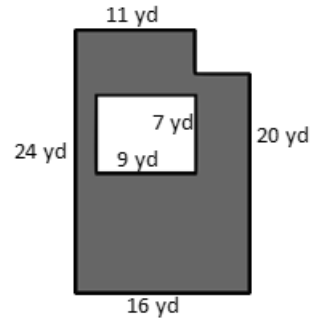
Name _____   Date _____

For homework, complete the top portion of each page. This will become an answer key for you to refer to when completing the bottom portion as a mini-personal white board activity during the summer.

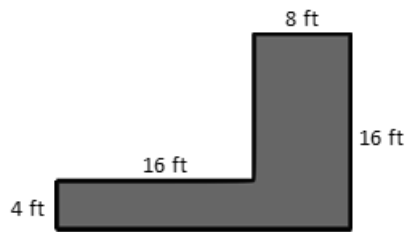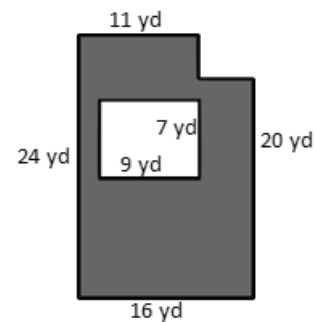Find the area of the figure that is shaded.

1.

8 ft

16 ft

16 ft

4 ft

2.

11 yd

7 yd
9 yd

24 yd

20 yd

16 yd

- -

Find the area of the figure that is shaded.

1.

8 ft

16 ft

16 ft

4 ft

2.

11 yd

7 yd
9 yd

24 yd

20 yd

16 yd

Challenge: Replace the given dimensions with different measurements, and solve again.

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3. A wall is 8 feet tall and 19 feet wide. An opening 7 feet tall and 8 feet wide was cut into the wall for a doorway. Find the area of the remaining portion of the wall.

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Lesson 15: Create and determine the area of composite figures.

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Name _____   Date _____

Work with your partner to create each floor plan on a separate piece of paper, as described below.

You should use a protractor and a ruler to create each floor plan and be sure each rectangle you create has two sets of parallel lines and four right angles.

Be sure to label each part of your model with the correct measurement.

1. The bedroom in Samantha's dollhouse is a rectangle 26 centimeters long and 15 centimeters wide. It has a rectangular bed that is 9 centimeters long and 6 centimeters wide. The two dressers in the room are each 2 centimeters wide. One measures 7 centimeters long, and the other measures 4 centimeters long. Create a floor plan of the bedroom containing the bed and dressers. Find the area of the open floor space in the bedroom after the furniture is in place.

2. A model of a rectangular pool is 15 centimeters long and 10 centimeters wide. The walkway around the pool is 5 centimeters wider than the pool on each of the four sides. In one section of the walkway, there is a flowerbed that is 3 centimeters by 5 centimeters. Create a diagram of the pool area with the surrounding walkway and flowerbed. Find the area of the open walkway around the pool.

Name _____   Date _____

For homework, complete the top portion of each page. This will become an answer key for you to refer to when completing the bottom portion as a mini-personal white board activity during the summer.

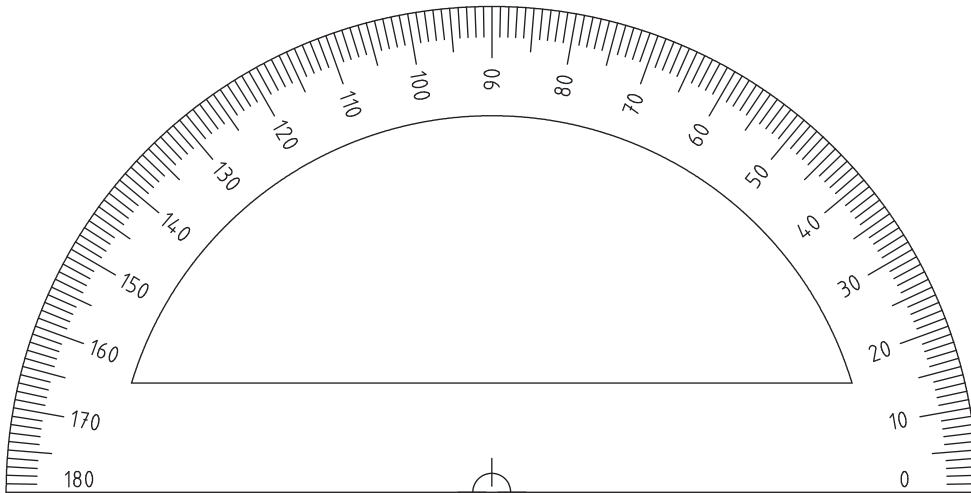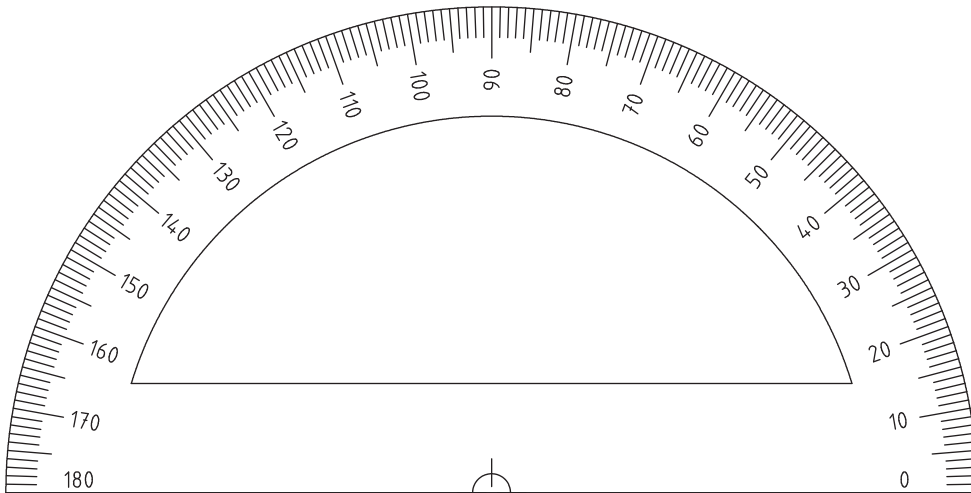Use a ruler and protractor to create and shade a figure according to the directions. Then, find the area of the unshaded part of the figure.

1. Draw a rectangle that is 18 cm long and 6 cm wide. Inside the rectangle, draw a smaller rectangle that is 8 cm long and 4 cm wide. Inside the smaller rectangle, draw a square that has a side length of 3 cm. Shade in the smaller rectangle, but leave the square unshaded. Find the area of the unshaded space.
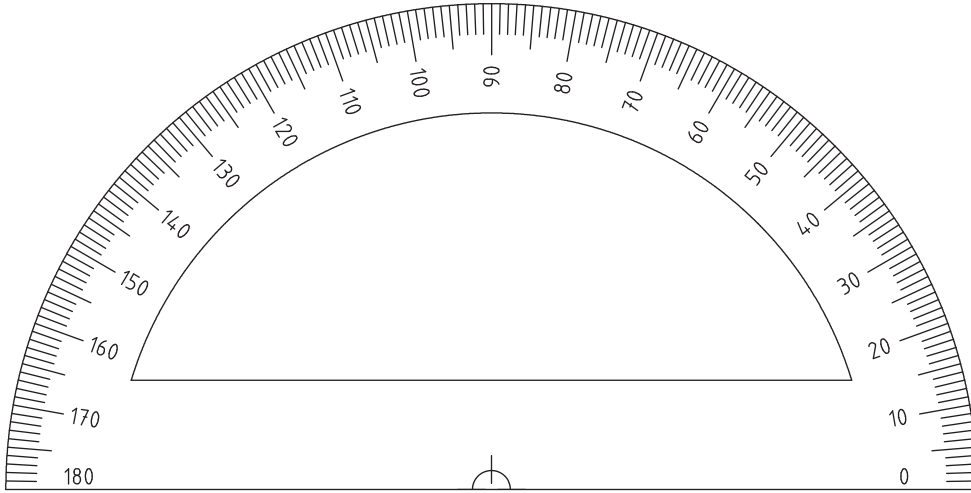
- -

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Lesson 16:   Create and determine the area of composite figures.

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2. Emanuel's science project display board is 42 inches long and 48 inches wide. He put a 6-inch border around the edge inside the board and placed a title in the center of the board that is 22 inches long and 6 inches wide. How many square inches of open space does Emanuel have left on his board?

- -

Challenge: Replace the given dimensions with different measurements, and solve again.

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Cut Out Packet

protractor

Lesson 16: Create and determine the area of composite figures.

1

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centimeter ruler

Lesson 16: Create and determine the area of composite figures.

2

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Name _____ Date _____

Convert Units: Teacher Card

Materials: (S) Mini-personal white board

  T: (Write <u>1 m 20 cm</u> = _____ cm.)
     <u>1 m 20 cm</u> is how many <u>centimeters</u>?
  S: <u>120 centimeters</u>.

Repeat the process with this sequence:

   1 m 80 cm = 180 cm

   3 km 249 m = 3,249 m

   4 L 71 mL = 4,071 mL

   2 kg 5 g = 2,005 g

New Problem

  T: (Write _____ = _____.)

     _____is how many _____?

  S: _____.

Add Large Numbers: Teacher Card

Materials: (S) Mini-personal white board

  T: (Write <u>747</u> thousands <u>585</u> ones.)
     On your board, write this number in
     standard form.
  S: (Write <u>747,585</u>.)
  T: (Write <u>242 </u>thousands <u>819</u> ones.)
     Add this number to <u>747,585</u> using the
     standard algorithm.
  S: (Write <u>747,585</u> + <u>242,819</u> = <u>990,404</u>
     using the standard algorithm.)

Continue the process with this sequence:

528,649 + 247,922 = 776,571

348,587 + 629,357 = 977,944

426,099 + 397,183 = 823,282

New Problem

  T: (Write _____thousands _____ones.)
     On your board, write this number in
     standard form.

  S: (Write _____.)

  T: (Write _____ thousands _____ ones.)

     Add this number to _____

     using the standard algorithm.

  S: (_____ + _____ = _____

     using the standard algorithm.)

---

fluency cards

Subtract Large Numbers: Teacher Card

Materials: (S) Mini-personal white board

    T: (Write <u>600</u> thousands.) On your board, write this number in standard form.

    S: (Write <u>600,000</u>.)

    T: (Write <u>545</u> thousands <u>543</u> ones.) Subtract this number from <u>600,000</u> using the standard algorithm.

    S: (Write <u>600,000</u> − <u>545,543</u> = <u>54,457</u> using the standard algorithm.)

Continue the process with this sequence:

400,000 − 251,559 = 148,441

700,000 − 385,476 = 314,524

600,024 − 197,088 = 402,936

New Problem

    T: (Write _____ thousands .) On your board, write this number in standard form.

    S: (Write _____.)

    T: (Write _____ thousands _____ones.) Subtract this number from _____ using the standard algorithm.

    S: (_____ − _____ = _____ using the standard algorithm.)

Multiply Mentally: Teacher Card

Materials: (S) Mini-personal white board

    T: (Write <u>32</u> × <u>3</u> =_____.)
Say the multiplication sentence.

    S: <u>32</u> × <u>3</u> = <u>96</u>.

    T: (Write <u>32</u> × <u>3</u> = <u>96</u>. Below it, write <u>32</u> × <u>20</u> = _____.)
Say the multiplication sentence.

    S: <u>32</u> × <u>20</u> = <u>640</u>.

    T: (Write <u>32</u> × <u>20</u> = <u>640</u>. Below it, write <u>32</u> × <u>23</u> = _____.)
On your board, solve <u>32</u> × <u>23</u>.

    S: (Write <u>32</u> × <u>23</u> = <u>736</u>.)

Repeat the process with this sequence:

42 × 2 = 84, 42 × 20 = 840, 42 × 22 = 924

31 × 4 =124, 31 × 40= 1,240, 31 × 44 = 1,364

New Problem

    T: (Write _____ × _____ = _____.)
Say the multiplication sentence.

    S: _____ × _____ = _____

    T: (Write _____ × _____ = _____. Below it, write _____ × _____ = _____.)
Say the multiplication sentence.

    S: _____ × _____ = _____.

    T: (Write _____ × _____ = _____. Below it, write _____ × _____ = _____.)
On your board, solve _____ × _____.

    S: (Write _____ × _____ = _____.)

fluency cards

Divide Mentally: **Teacher Card**

Materials: (S) Mini-personal white board

T: (Write <u>40</u> ÷ <u>2</u>.) Write the division sentence in unit form.

S: <u>4</u> tens ÷ <u>2</u> = <u>2</u> tens.

T: (To the right, write <u>8</u> ÷ <u>2</u>.) Write the division sentence in unit form.

S: <u>8</u> ones ÷ <u>2</u> = <u>4</u> ones.

T: (Write <u>48</u> ÷ <u>2</u>.) Write the complete division sentence in unit form.

S: <u>4</u> tens <u>8</u> ones ÷ <u>2</u> = <u>2</u> tens <u>4</u> ones.

T: Say the division sentence.

S: <u>48 ÷ 2 = 24</u>.

Continue the process with this sequence:

90 ÷ 3 = 30, 3 ÷ 3 = 1, 93 ÷ 3 = 31

80 ÷ 4 = 20, 8 ÷ 4 = 2, 88 ÷ 4 = 22

180 ÷ 6 = 30, 6 ÷ 6 = 1, 186 ÷ 6 = 31

New Problem

T: (Write _____ ÷ _____.) Write the division sentence in unit form.

S: ____ tens ÷ ____ = ____ tens.

T: (To the right, write _____ ÷ _____.) Write the division sentence in unit form.

S: ____ ones ÷ ____ = ____ ones.

T: (Write _____ ÷ _____.) Write the complete division sentence in unit form.

S: ____ tens ____ ones ÷ ____ = ____ tens ____ ones.

T: Say the division sentence.

S: ____ ÷ ____ = ____.

fluency cards

State the Value of a Set of Coins: Teacher Card

Materials: (S) Mini-personal white board

   T: (Draw 2 quarters and 4 dimes as number disks labeled 25¢ and 10¢.) What's the value of 2 quarters and 4 dimes?

   S: 90¢.

   T: Write 90 cents as a fraction of a dollar.

   S: (Write $\frac{90}{100}$ dollar.)

   T: Write 90 cents in decimal form using the dollar sign.

   S: (Write $0.90.)

Continue the process with this sequence:

1 quarter 9 dimes 12 pennies = 127¢, $\frac{127}{100}$ dollar, $1.27

3 quarters 5 dimes 20 pennies = 145¢, $\frac{145}{100}$ dollar, $1.45

New Problem

   T: (Draw_____ quarters and _____ dimes as number disks labeled 25¢ and 10¢.) What's the value of _____?

   S: _____.

   T: Write _____ cents as a fraction of a dollar.

   S: (Write _____ dollar.)

   T: Write _____ cents in decimal form using the dollar sign.

   S: (Write $_____.)

Break Apart 180°: Teacher Card

Materials: (S) Mini-personal white board, protractor, straightedge

   T: (Project a number bond with a whole of 180°. Fill in 80° for one of the parts.) On your board, complete the number bond, filling in the unknown part.

   S: (Draw a number bond with a whole of 180°, and 80° and 100° as parts.)

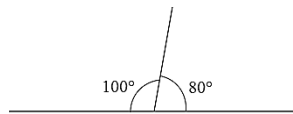   T: Use your protractor to draw the pair of angles.

   S: (Draw and label the two angles that make 180°.)

Continue the process for
120° + 60° = 180°
35° + 145° = 180°
_____ + _____ = 180°

100°   80°

New Problem

   T: (Project a number bond with a whole of 180°. Fill in _____° for one of the parts.) On your board, complete the number bond, filling in the unknown part.

   S: (Draw a number bond with a whole of 180°, and _____° and _____° as parts.)

   T: Use your protractor to draw the pair of angles.

   S: (Draw and label the two angles that make 180°.)

fluency cards

EUREKA MATH™

Lesson 17:   Practice and solidify Grade 4 fluency.   **6**

Bingo:

1. Players write a vocabulary term in each box of the math bingo game. Each term should be used only once. The box that says *Math Bingo* is a free space.
2. Players place the filled-in math bingo template in their mini-personal white boards.
3. One person is the caller and reads the definition on a vocabulary card.
4. Players cross off (or cover) the term that matches the definition.
5. *Bingo!* is called when 5 vocabulary terms in a row are crossed off diagonally, vertically, or horizontally. The free space counts as 1 box toward the needed 5 vocabulary terms.
6. The first player to have 5 in a row reads each crossed off word, states the definition, and gives a description or an example of each word. If all words are reasonably explained as determined by the caller, the player is declared the winner.

Math Jeopardy:

Structure: Teams or partnerships. Callers should prepare the game in advance.

1. The definitions are sorted into labeled columns by a caller: units, lines and angles, the four operations, and geometric shapes.
2. The first term directly below the heading has a value of $100, the next $200, and so on. The caller should make an effort to order the questions from easiest to hardest.
3. Player 1 chooses a column and a dollar value, for example, "I choose geometry terms for $100." The caller reads, "The answer is…"
4. The players say the matching question, for example, "What is a quadrilateral?"
5. The first person to correctly state the question wins the dollar value for that card.
6. Play continues until all cards are used.
7. The player with the highest dollar value wins.

Concentration:

Structure: Teams or partnerships.

1. Create an array of all the cards face down.
2. Players take turns flipping over pairs of cards to find a match. A match is a vocabulary term and its definition. Cards keep their precise location in the array if not matched. Remaining cards are not reconfigured into a new array.
3. After all cards are matched, the player with the most pairs is the winner.

Math Pictionary:

Structure: Teams or partnerships.

1. A timer is set for 1 minute.
2. A vocabulary term is chosen from a bag by a player from Team 1, who draws an example as quickly as possible.
3. The player's teammate(s) tries to guess the vocabulary term. When the term is guessed, a new term is chosen by the same player. The process is repeated as many times as possible within the minute. Terms not guessed when the timer sounds go back in the bag.
4. A player from Team 2 repeats the process.
5. Teams count the number of words guessed. The team with the most words is the winner.

game descriptions

		Math BINGO!		

		Math BINGO!		

math bingo

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