Name _____ Date _____

1. Complete these ratio tables for two paint mixtures.

Peacock Purple	
Red	Blue
2	5
	15
14	

Purple Plum	
Red	Blue
7	3
	15
14	

2. Which paint is more red? _____

3. Which paint is less red? _____

4. Graph two points from each table. Draw and label a line for *Peacock Purple* and a line for *Purple Plum*.
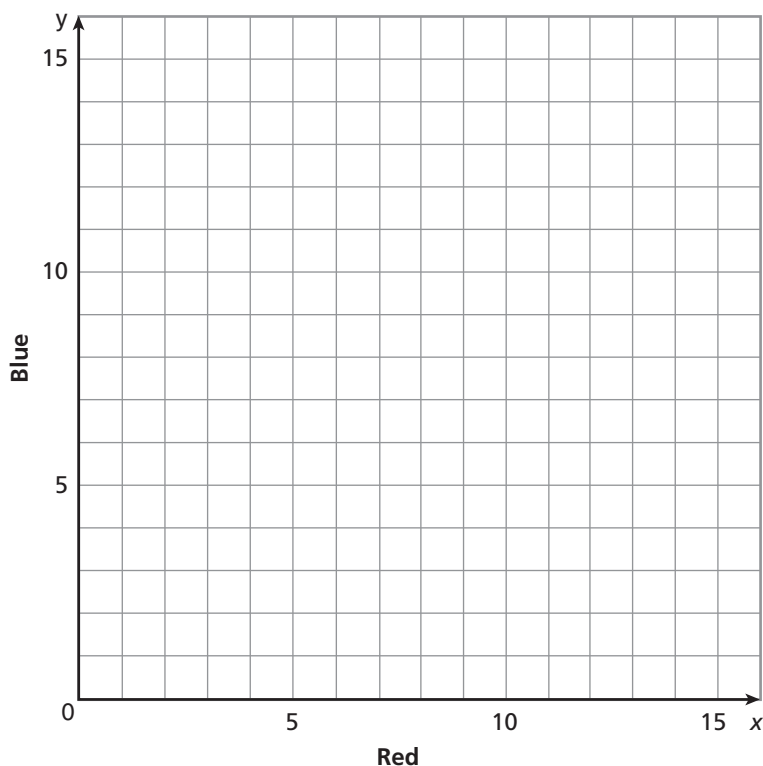
5. Explain how to use the two lines on the graph and a straightedge to determine which paint is more blue.

_____

_____
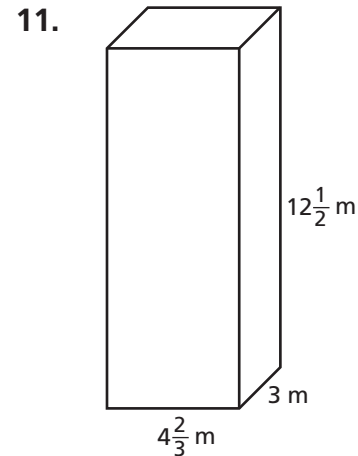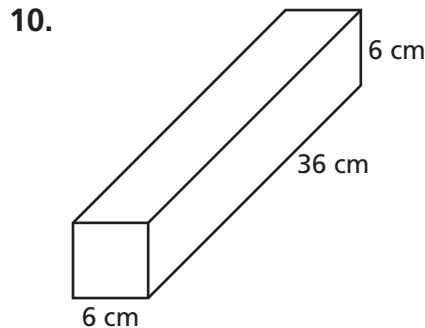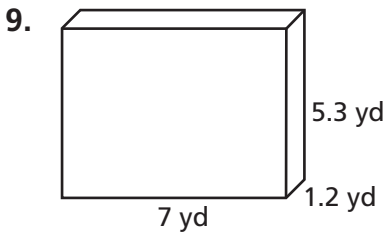
_____

Remembering

Solve.

1. It takes Elizabeth 15 minutes to walk 5 blocks. At that rate, how many minutes will it take her to walk 30 blocks?

   _____

2. Anyola is making a box out of cardboard. The box is in the shape of a hexagonal pyramid. The side length of the regular hexagonal base is 14 in. and the distance to the center is 12 in. The height of a triangular face is 20 in. How much cardboard does she need to make the box?

   _____

Write equivalent fractions. Complete.

3.	$\frac{3}{8}$ $\frac{1}{10}$ $\rightarrow$	
4.	>, <	
5.	+	
6.	−	
7.	•	
8.	÷	

Find the volume.

9.

7 yd   5.3 yd   1.2 yd

10.

6 cm   36 cm   6 cm

11.

$12\frac{1}{2}$ m   3 m $4\frac{2}{3}$ m

$V =$ _____ $V =$ _____ $V =$ _____

12. **Stretch Your Thinking** Kevon mixes red and yellow paint to make orange. The first mixture has 5 parts yellow and 2 parts red. The more red Kevon puts in the mixture, the darker the color. Kevon wants to make an orange paint that is darker than his first mixture. How many parts of red should he mix with 10 parts yellow? Explain your answer.

   _____

   _____

Comparing Ratios

Solve.

1. Grammy Suzy's recipe for summer salad is 2 cucumbers for every 3 tomatoes. How many tomatoes are in a salad with 5 cucumbers?

   _____

2. Eighteen of Susan's muffins weigh the same as 15 of Tom's muffins. How many of Susan's muffins weigh the same as 7 of Tom's muffins?

   _____

3. Foster Publishers' printing press can print 5 dictionaries in 8 minutes. How many dictionaries can it print in 10 minutes?

   _____

4. A turtle crawled 21 meters in 12 minutes. How long did it take her to crawl 14 meters if she crawled at the same rate the whole time?

   _____

Remembering

1. Roger averages 3 hits for every 12 times he is at bat. At this rate, how many times must he bat to get 12 hits?

2. A box is $\frac{3}{4}$ filled with raisins. The box has length $5\frac{1}{2}$ inches, width $3\frac{1}{2}$ in., and height 7 in. What is the volume of the raisins?

Complete the ratio tables for the two recipes.

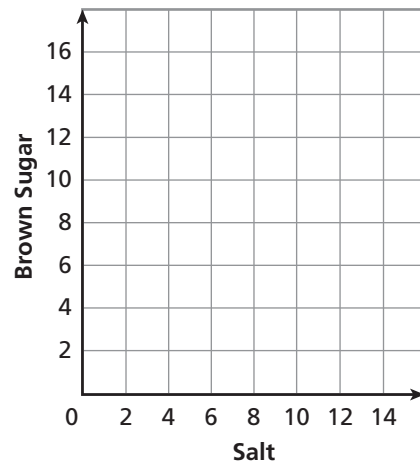3.

Grandma's Sweet and Salty Trail Mix

Salt	Brown Sugar
3	2
15	
	8

4.

Aunt Em's Sweet and Salty Trail Mix

Salt	Brown Sugar
4	5
	10
12	

5. Whose recipe is saltier? _____

6. Whose recipe is sweeter? _____

7. Graph two points from each table. Draw a line for each recipe. How do the lines help you determine whose trail mix is sweeter?

8. **Stretch Your Thinking** Edney wants to make a recipe for trail mix that is saltier than Aunt Em's but not as salty as Grandma's. What ratio of salt to brown sugar could Edney use? Use the graph above to help you. Explain.

Homework

1. Complete the ratio table.

Cups of Juice

Berry			1	4	6	
Orange		1		10		40

a. The basic ratio of $\dfrac{\text{berry}}{\text{orange}}$ is _____.

b. There is _____ cup of berry juice for every cup of orange juice.

c. The basic ratio of $\dfrac{\text{orange}}{\text{berry}}$ is _____.

d. There are _____ cups of orange juice for every cup of berry juice.

Solve each proportion.

2. $\dfrac{24}{15} = \dfrac{a}{35}$

3. $\dfrac{b}{15} = \dfrac{8}{20}$

4. $\dfrac{4}{9} = \dfrac{r}{6}$

$a =$ _____

$b =$ _____

$r =$ _____

Solve each problem using ratios in fraction notation.

5. Fifteen 2-inch nails weigh 35 grams. How many of these nails weigh 175 grams?

6. Five yards of shirt fabric cost $9. How much do 12 yards of the same fabric cost?

_____   _____

Ratios, Fractions, and Fraction Notation

Remembering

1. Merril is making a box out of cardstock. A diagram
   of the box is shown. Merril will fill the box with number
   cubes each $1\frac{1}{2}$ in. on an edge. How much cardstock does
   Merril need for the box? How many number cubes can
   Merril fit in the box?

   6 in.

   3 in.

   $7\frac{1}{2}$ in.

_____
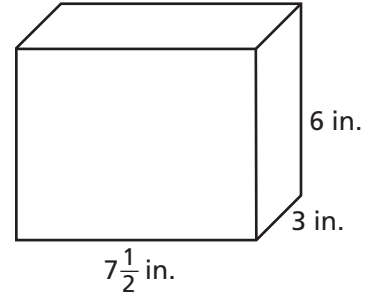
Solve the equation or evaluate the expression for $b = 4$ and $c = 5$.

2. $\frac{2}{3}g = 45$

3. $7(c^2 - b \cdot 3) + 10$

4. $b + c \cdot b + b - (b + c)$

$g =$ _____   _____   _____

5. $6 + 2t = 10$

6. $\frac{y}{32} = 12$

7. $(7 + b)^2 - c \cdot b$

$t =$ _____ $y =$ _____   _____

Solve.

8. At a bakery, a baker prepares 6 dozen blueberry
   muffins for every 5 dozen apple muffins. If the baker
   prepares 16 dozen blueberry muffins, how many dozen
   apple muffins will he prepare?

_____

9. A rabbit hopped 11 meters in 6 minutes. At that rate,
   how far did the rabbit hop in 8 minutes?

_____

10. **Stretch Your Thinking** Jeremy and April are braiding
    a rug. Jeremy makes 4 braids every 11 minutes. April
    makes 7 braids every 17 minutes. Who is braiding at a
    faster rate? Explain.

_____

_____

_____

Solve each proportion. Use any method.

1. $\frac{7}{4} = \frac{12}{a}$

2. $\frac{10}{15} = \frac{c}{18}$

3. $\frac{9}{r} = \frac{6}{8}$

$a =$ _____ $c =$ _____ $r =$ _____

Solve each problem. Use any method.

4. Lemon Yellow paint can be made by mixing 5 gallons of yellow paint and 2 gallons of white paint. How many gallons of yellow paint should be mixed with 9 gallons of white paint to make Lemon Yellow?

5. Bill's trail mix has 6 cups of walnuts and 10 cups of cranberries. Using the same recipe, how many cups of walnuts go with 15 cups of cranberries?

_____   _____

6. Mrs. Lee uses 9 cups of water for every 2 cups of rice. How many cups of water are needed for 5 cups of rice?

7. Doris bought 15 yards of fabric for $7. How much do 6 yards of the same fabric cost?

_____   _____

Name _____ **Date** _____

Remembering

1. Mr. O'Neil is installing wood flooring to cover the area shown. Write an expression that you can use to find the amount of flooring he needs. Then use the expression to find the amount of flooring.

_____

_____

11 ft

15 ft

12 ft   13 ft

16 ft
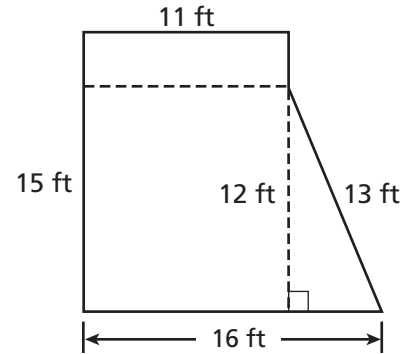
Find the value of n.

2. $4.5 \cdot 11 = n$

$n =$ _____

3. $n = 6.774 \div 12$

$n =$ _____

4. $n = 56 \cdot 1.2$

$n =$ _____

5. $\frac{n}{25} = \frac{3}{15}$

$n =$ _____

6. $\frac{20}{n} = \frac{45}{54}$

$n =$ _____

7. $\frac{36}{32} = \frac{n}{64}$

$n =$ _____

Solve.

8. There are 36 feet of ribbon in 12 packages. How many feet of ribbon are in 21 packages?

_____

9. Six boxes of crackers cost $18. At this price, how much do 15 boxes cost?

_____

10. **Stretch Your Thinking** The table shows how much two friends spent for deli meat at different stores. Jaime spent less per pound than Philip, but more per pound than Shazad. If Jaime bought 5 lb of deli meat, how much could she have spent? Explain.

Cost of Deli Meat	
Philip	2 lb for $5
Shazad	4 lb for $9

_____

_____

_____

_____

_____

Name _____   **Date** _____

To make Glowing Green paint, blue and yellow paint
are mixed in a ratio of 3 to 4.

Draw tape diagrams to help you solve these problems.   *Show your work.*

1. How much yellow paint should a store
mix with 15 liters of blue paint to make
Glowing Green paint?

_____

2. How much blue paint and yellow paint
should a store mix to make 98 gallons of
Glowing Green paint?

_____

_____

3. How much blue paint should a store mix
with 17 quarts of yellow paint to make
Glowing Green paint?

_____

4. How much blue and yellow paint should
a store mix to make 50 gallons of
Glowing Green paint?

_____

_____

Remembering

1. Centra bought a dress and three shirts. The dress cost $24.50. The shirts cost $11.50 each. How much did Centra spend?

_____

Use the Distributive Property to simplify each expression.

2. $6(m + 7 + t) + 6m - 2t$ 3. $x(x + 23) - 10x + 3x^2$ 4. $10 + 5(a + b) - 5a$

_____   _____   _____

5. $7st + 4t(s + t + 4) - 9t$ 6. $4 \cdot 3s + 7 \cdot 2s$ 7. $15 + 7r + r(r - 3) - r^2$

_____   _____   _____

Solve.

8. Gerri's recipe calls for 8 carrots for every 5 servings. How many carrots are needed for 15 servings?

_____

9. The cast of the play makes 275 programs for 5 shows. How many programs will be needed for 13 shows?

_____

10. Marisa needs 8 gallons of lemonade for every 60 guests that come to her party. If she is inviting 25 guests, how many gallons of lemonade does she need?

_____

11. Ned can buy 12 juice boxes for $4.80. At that price, how many juice boxes can he buy for $24?

_____

12. **Stretch Your Thinking** Juju is making punch for a picnic. She uses 0.75 liter of apple juice and 1.2 liters of grape juice. By mistake, she adds an extra 0.3 liter of apple juice to the punch bowl before putting in any grape juice. How many liters of grape juice should she add to the bowl so that the ingredients will be in the original ratio? Explain.

_____

_____

Edmundo made a salad dressing by mixing mayonnaise and ketchup in a ratio of 2 to 3.

   1. Draw a tape diagram for the mixture.

For Exercises 2–6, complete the sentences to describe Edmundo's mixture.

   2. There are _____ parts ketchup in _____ parts of the mixture.

   3. Mayonnaise and ketchup are mixed in a ratio of _____ to _____ or _____ : _____.

   4. The amount of ketchup is _____ times as much as the amount of mayonnaise.

   5. The amount of mayonnaise is _____ times as much as the amount of ketchup.

   6. The amount of the mixture is _____ times as much as the amount of ketchup.

   7. Let K be the number of milliliters of ketchup.
   Let M be the number of milliliters of mayonnaise.
   Write two equations relating K and M.

   _____

Lee made a salad dressing by mixing oil and vinegar in a ratio of 7 to 2.

   8. Draw a tape diagram for the mixture.

For Exercises 9–13, complete the sentences to describe Lee's mixture.

   9. There are _____ parts oil in _____ parts of the mixture.

  10. Oil and vinegar are mixed in a ratio of _____ to _____ or _____ : _____.

  11. The amount of oil is _____ times as much as the amount of vinegar.

  12. The amount of vinegar is _____ times as much as the amount of oil.

  13. The amount of the mixture is _____ times as much as the amount of oil.

  14. Let L be the number of milliliters of oil.
   Let V be the number of milliliters of vinegar.
   Write two equations relating L and V.

   _____

Remembering

Write each word expression as an algebraic expression.

1. the sum of 5 and u

_____

2. Divide 7 more than t by 3.

_____

3. Subtract $\frac{2}{5}$ from the product of 4 and s.

_____

4. Divide $\frac{2}{3}$ by y.

_____

To make banana berry smoothies, Just Juice mixes water and juice in a ratio of 5 to 3. Draw tape diagrams to help you solve these problems.

5. How much water and juice should Just Juice mix to make 104 quarts of banana berry smoothies?

_____

_____

6. How much water should Just Juice mix with 23 gallons of juice to make banana berry smoothies?

_____

7. **Stretch Your Thinking** To make Citrus Orange paint, a paint store mixes yellow, white, and red paint in the ratio of 5 to 3 to 1. How many gallons of yellow, white, and red paint does the store need to mix to make 135 gallons of Citrus Orange paint?

_____

_____

_____

Ratios and Multiplicative Comparisons

Solve. Use different methods including tables, Factor Puzzles, cross-multiplication, and tape diagrams. Look for the problem that cannot be solved with any of these!

Show your work.

1. A box of laundry detergent costs $12 and can be used for 50 loads of laundry. How much does the detergent for 7 loads of laundry cost?

_____

2. Mr. Parker will mix antifreeze and water in a ratio of 2 to 1. He needs 27 quarts of the antifreeze and water mixture to fill his car's radiator. How much antifreeze and how much water should Mr. Parker mix together?

Antifreeze: _____ Water: _____

3. Marta and Nicole run laps around the track. They run at the same constant speed but Marta starts first. When Marta has run 5 laps, Nicole has run 3 laps. How many laps will Nicole have run when Marta has run 8 laps?

_____

4. Pokey the snail travels 25 centimeters every 2 minutes. How long will it take Pokey to go 60 centimeters?

_____

5. If a 3-pound bag of oranges costs $5, how many pounds of oranges should you be able to buy for $12?

_____

6. At a perfume factory, fragrance designers are making Green Blossom perfume by mixing new grass fragrance with $\frac{3}{4}$ times as much apple blossom fragrance. How much new grass fragrance and apple blossom fragrance will they need to mix to make 1 liter of Green Blossom perfume?

New grass: _____ Apple blossom: _____

Remembering

1. Marilou is making a collage using a trapezoid pattern. The area of her shape is 27.3 in.^{2}. The length of one base is 7 in. and the height is 6 in. What is the length of the other base?

2. A flower vase is shaped like a rectangular prism. The base of the vase is 11 in. by 8 in. The vase is $\frac{2}{3}$ full. There are 704 in.^{3} of water in the vase. What is the height of the vase?

Nathan mixes 5 parts water with 2 parts liquid plant food.

3. Draw a tape diagram for the mixture.

4. What is the ratio of water to food? food to water?

water to food: _____

food to water: _____

5. How many times the amount of water is the amount of food?

**6.** How many times the amount of food is the amount of water?

7. Let w be the number of cups of water. Let f be the number of cups of plant food. Write two equations relating w and f.

8. Stretch Your Thinking Millie and Leo drew rectangular prisms. The ratio of the volume of Millie's prism to the volume of Leo's prism is 5:4. If the dimensions of Millie's prism are 3 in., 6 in., and 10 in., what could be the dimensions of Leo's prism? Explain.
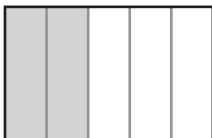
Name _____ Date _____

1. Write each percent as a fraction with denominator 100 and as a decimal. Then place the percents and decimals on the number lines.

Percent	42%	71%	80%	8%	88%	108%
Fraction						
Decimal						

0   1

0%   100%
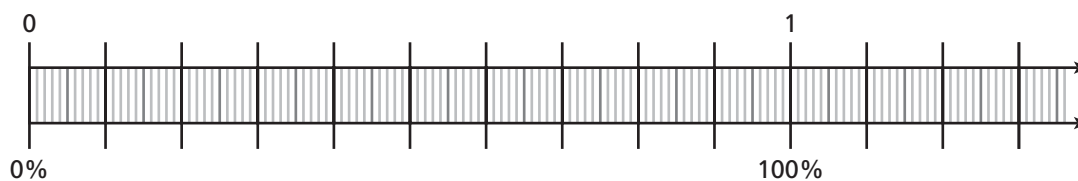
What percent of the figure is shaded?
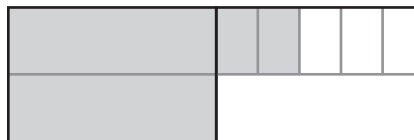
2. _____

3. _____

4. _____

5. _____

6. _____

7. _____

1. Bonnie runs $1\frac{2}{3}$ times as far as John each day. If Bonnie runs 5 miles on Monday, $3\frac{1}{2}$ miles on Tuesday, and $5\frac{3}{4}$ miles on Wednesday, how many miles did John run in all those three days?

_____

Solve each equation.

2. $7y = 34$ **3.** $\frac{j}{15} = 20$ **4.** $\frac{5}{6}k = \frac{4}{7}$

$y =$ _____ $j =$ _____ $k =$ _____

Solve.

5. It takes Joanna 15 minutes to complete 4 puzzles. At that rate, how many puzzles can she complete in 1 hour 45 minutes?

_____

6. An 8-pound bag of potato costs $18. At this price, how much would 15 pounds of potatoes cost?

_____

7. Sarah can fit 115 books in 2 bookcases. At that rate, how many bookcases does she need to hold 360 books?

_____

8. At a math convention, Nora sold 13 rulers for $110.50. At the same price, how much would 7 rulers cost?

_____

9. Stretch Your Thinking Jeremy and Caitlin collect baseball cards. The ratio of Jeremy's cards to Caitlin's cards was 9 to 3. After Jeremy gave 12 cards to Caitlin, they had an equal number of cards. How many cards did Caitlin and Jeremy have at first? Explain.

_____

_____

_____

_____

Homework

The 400 dogs at a shelter are in 100 groups of 4.
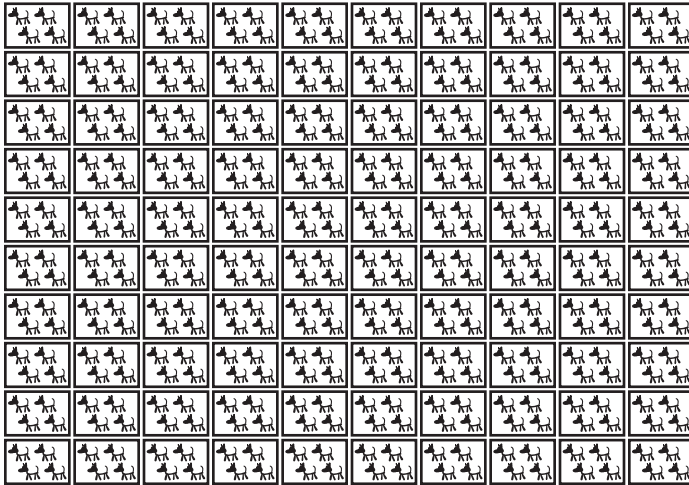
1. Color 7% of the dogs. How many dogs is this?

_____

2. Color 65% of dogs with a different color. How many dogs is this?

_____

3. What is 98% of 700 cats? Solve this in two ways.

_____

4. What is 22% of 500 birds? Solve this in two ways.

_____

Remembering

1. Gabby sold 24 bracelets for $126. How much would 35 bracelets cost?

_____

Solve each proportion.

2. $\frac{8}{10} = \frac{16}{y}$

3. $\frac{6}{7} = \frac{4}{y}$

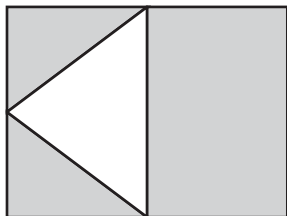4. $\frac{12}{y} = \frac{19}{4}$

$y =$ _____ $y =$ _____ $y =$ _____

Tell what percent of the figure is shaded. Then write the percent as a fraction with denominator 100 and as a decimal.
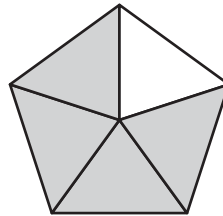
5.

Percent: _____

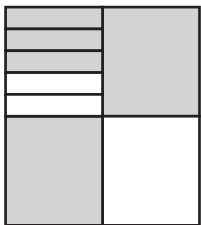Fraction: _____

Decimal: _____

6.

Percent: _____

Fraction: _____
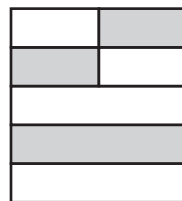
Decimal: _____

7.

Percent: _____

Fraction: _____

Decimal: _____

8.

Percent: _____

Fraction: _____

Decimal: _____

9. **Stretch Your Thinking** Vanessa shaded 55% of her picture red. Did she shade more or less than $\frac{2}{5}$ of the picture? Explain.

_____

_____

Percent of a Number

Solve in two ways.

Show your work.

1. Mr. Wallace took 600 mg of medicine. This was 75% of the full dose. What is the full dose?

_____

2. A full dose of a different medicine is 600 mg. Ms. Mehta took 75% of a full dose. How much medicine did she take?

_____

3. Daniel has read 180 pages. This is 80% of the entire book. How long is the book?

_____

4. Lauren's book is 180 pages long. She has read 80% of it. How many pages has she read?

_____

5. What is 20% of 90?

6. 20% of what number is 90?

_____   _____

7. 60% of what number is 150?

8. What is 60% of 150?

_____   _____

1. On a certain TV station, there are 4 commercials during every 30-minute period. How many minutes of TV do you need to watch to have watched more than 10 commercials?

   _____

2. The width of a box of trail mix is $\frac{1}{2}$ its height. The height is $2\frac{1}{2}$ in. more than its length. If the length of the box is 8 in., how much trail mix does the box hold?

   _____

Write each statement as an inequality. Then give three solutions of the inequality.

3. 3 times 7 is less than or equal to *x*.

   _____

   _____

4. 16 is greater than *u* + 2.

   _____

   _____

5. *h* is greater than 4 fewer than 6.

   _____

   _____

6. *p* divided by 3 is greater than or equal to 12.

   _____

   _____

Solve.

7. What is 55% of 300 trees?

   _____

8. What is 30% of 800 children?

   _____

9. What is 63% of 500 actors?

   _____

10. What is 88% of 600 shirts?

    _____

11. **Stretch Your Thinking** Alice's book has 200 pages. Alice has read 75% of the pages in her book. Nina has read the same number of pages but only 50% of the pages in her book. How many pages are in Nina's book? Explain.

    _____

Homework

Name _____ **Date** _____

Solve.   *Show your work.*

1. If 560 mg is 80% of a dose of medicine, how much is a full dose?

_____

2. If a full dose of medicine is 560 mg, how much is 80% of a dose?

_____

3. A patient was supposed to take 560 mg of medicine but took only 420 mg. What percent of the medicine did the patient take?

_____

4. If the sales tax is 7%, how much tax will you pay on a CD that costs $15?

_____

5. In Smallville, 2,400 out of 20,000 workers are unemployed. In Bigtown, 6,750 out of 75,000 workers are unemployed. Which town has a larger unemployment problem? Why?

_____

_____

6. Four out of every 5 dentists recommend Sparkle toothpaste. What percent of dentists recommend Sparkle toothpaste?

_____

7. The recommended daily allowance of cholesterol is 300 mg. What is 80% of the recommended daily allowance of cholesterol?

_____

1. It takes Jeff 14 minutes to drive $10\frac{1}{2}$ miles. At this rate, how many minutes will it take him to drive 23 miles?

_____

Solve.

2. $56.3 - 19.34$

_____

3. $116 \div 29$

_____

4. $34.95 \div 1.5$

_____

5. $\frac{1}{2} \div 1\frac{2}{3}$

_____

6. $3\frac{4}{5} + 2\frac{1}{3}$

_____

7. $4\frac{5}{7} \div 2\frac{3}{4}$

_____

Solve.

8. What is 56% of 500 pages?

_____

9. 256 is 40% of what number?

_____

10. Joy drank 48 ounces of water. This was 80% of the total amount of water in the pitcher. How much water was in the pitcher?

_____

11. Indi bought a shirt for $30. He paid 7% sales tax. How much sales tax did Indi pay?

_____

12. **Stretch Your Thinking** Jonah took a survey. Of the students he surveyed, 40% of the students play baseball. Of those students, 60% also play soccer. If 12 students play both baseball and soccer, how many students did Jonah survey? Explain.

_____

_____

_____

_____

1. Write two unit rates relating meters (m) and kilometers (km).

_____

2. Convert 525 m to km using any method.

525 m = _____ km

3. Convert 4.3 km to m using any method.

4.3 km = _____ m

4. There are 5,280 feet in 1 mile. Write two unit rates relating feet (ft) and miles (mi).

_____

5. Convert 26,400 feet to miles.

26,400 ft = _____ mi

6. Convert $\frac{3}{4}$ mile to feet.

$\frac{3}{4}$ mi = _____ ft

Solve.

7. Find the area of a right triangle with base length 30 inches and height 3 feet.

_____

8. A cart is 50 cm tall. The cart has three boxes stacked on it, each 40 cm tall. Will the cart and the boxes fit through a door 2 m tall? Explain.

_____

_____

9. The soccer field is 300 feet long and 150 feet wide. The coach asked the players to run around the perimeter of the field 20 times during practice. One player commented that they must have run at least 5 miles. Was she right? Explain.
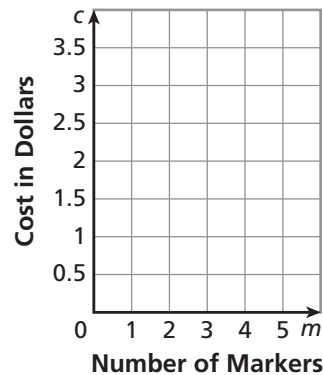
_____

_____

_____

Remembering

1. A bag of dried fruit is made up of 6 parts dried cranberries and 7 parts dried apricots. How many ounces of each fruit would be in a 117-ounce bag?

_____

2. The equation below shows the cost of markers. In the equation, m is the number of markers purchased and c is the cost of the markers in dollars. Complete the table.

$$c = 0.75m$$

Number of Markers (m)	Cost in Dollars (c)
1	
2	
3	
4	

3. Plot the points from the table. Connect the points if it makes sense to do so.

4. In Jill's class, there are 25 students and 14 of them are in the play. In Hiro's class there are 32 students and 24 of them are in the play. Which class has the greater percentage of students in the play?

_____

5. Stretch Your Thinking Vinny adds 136 + 17 and decides that 34% of 453 is greater than 153. Explain Vinny's thinking.

_____

_____

       Convert Units of Length

Name _____ **Date** _____

Solve.   *Show your work.*

1. The gas tank on a scooter holds 8.4 L of gas.
   How many milliliters is this?

   _____

2. A road race will have 7,500 runners. The race organizers
   want to have 500 mL of water available for each runner.
   How many liters of water will they need?

   _____

3. Samantha has a 15-gallon fish tank. She is filling it using
   a 1-quart container.

   a. How many times will she have to fill the container
      to completely fill the tank?

      _____

   b. If Samantha uses a 1-pint container instead of a
      1-quart container, how many times will she have
      to fill it?

      _____

4. During this track season, Mario has run five
   1,500-meter races and three 3,000-meter races.
   How many kilometers has he run in these eight
   races combined?

   _____

5. A puppy weighs 6 pounds. If he gains 12 ounces
   a week for the next 9 weeks, how much will he
   weigh 9 weeks from now?

   _____

6. A ceramics teacher bought 80 kg of clay and divided
   it evenly among her 25 students. How many grams of
   clay did each student get?

   _____

Name _____ **Date** _____

Remembering

1. To make Apple Green paint, Judith combines 5 parts yellow with 2 parts blue. How many gallons of blue does Judith need to use to make 17 gallons of Apple Green paint?

   _____

Write three solutions to each inequality.

2. $8 \cdot v < 72$

   _____

3. $6 + h > 25$

   _____

4. $24 \leq \frac{g}{8}$

   _____

5. $31 \leq k - 31$

   _____

Solve.

6. Stuban uses 5 cups walnuts for every 4 cups fruit in his mix. Geraldine uses 8 cups walnuts for every 5 cups fruit. Whose mix will taste nuttier?

   _____

7. Pam read 135 pages of a book this week. If this is 45% of the number of pages she normally reads in a week, how many pages does Pam usually read in a week?

   _____

8. Barry buys a rug that is 35 inches by 4 feet. What is the area of the rug? Write the answer in square inches and square feet. Then explain your answer.

   _____

   _____

   _____

9. Paul is stacking boxes against a wall that is 3.5 meters high. He has two boxes, one 170 centimeters high and one 134 centimeters high. Can Paul stack the boxes on top of one another? Explain.

   _____

   _____

   _____

10. **Stretch Your Thinking** How many cubic inches are in 1 cubic foot? Explain.

    _____

    _____

Convert Units of Liquid Volume, Mass, and Weight

Homework

Name _____ **Date** _____

The bar graph and circle graph show data about the sandwiches sold at Sandwich Stop last Saturday.

Kinds of Sandwiches Sold

Choice of Bread
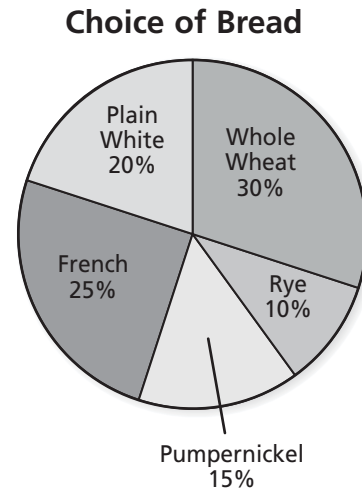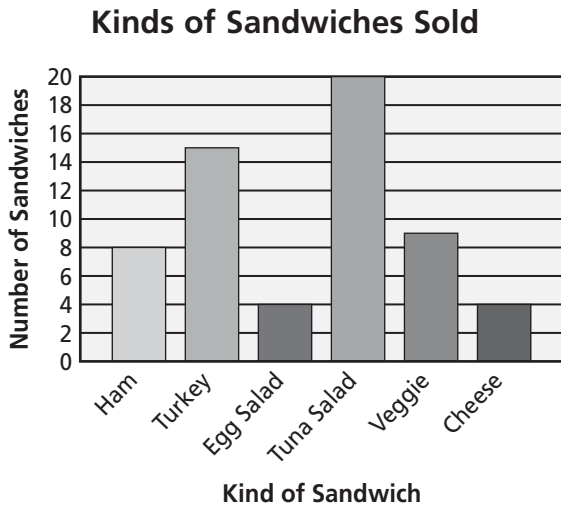
Solve. Write whether you used the bar graph, the circle graph, or both.

1. What percent of the sandwiches were turkey sandwiches?

_____   _____

2. Were more or fewer than $\frac{1}{4}$ of the sandwiches sold made on whole wheat bread?

_____   _____

3. How many sandwiches were made using whole wheat bread?

_____   _____

4. How many sandwiches were made using French bread?

_____   _____

5. What was the ratio of egg salad sandwiches to tuna salad sandwiches?

_____   _____

6. Do the tuna salad sandwiches sold make up more or fewer than 25% of the sandwiches sold?

_____   _____

Remembering

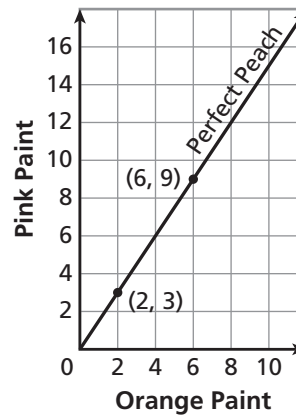**Name** _____ **Date** _____

1. A light blinks 18 times in 4 minutes. At that rate how many times will it blink in 6 minutes?

_____

2. Complete the ratio table for Sunset Peach paint.

Sunset Peach

Orange Paint	Pink Paint
3	4
6	
9	

3. The graph shows the ratio of orange paint to pink paint in Perfect Peach paint. Graph the ratio for Sunset Peach paint.

4. Explain how to use the graph to decide which paint is pinker.

_____

_____

_____

Solve.

4. Yolanda pours a pint of juice into each bottle. How many quarts of juice does Yolanda need to fill 90 bottles?

_____

5. Mrs. Houston puts 5 ounces of snack mix in each bag. How many pounds of snack mix does she need to fill 32 bags?

_____

6. Stretch Your Thinking An average person may drink 182.5 gallons of water a year. How many cups of water is that? Use the table to help you.

_____

1 pint = 2 cups
1 quart = 2 pints
1 gallon = 4 quarts

Focus on Mathematical Practices