What is the ratio of stars to circles?
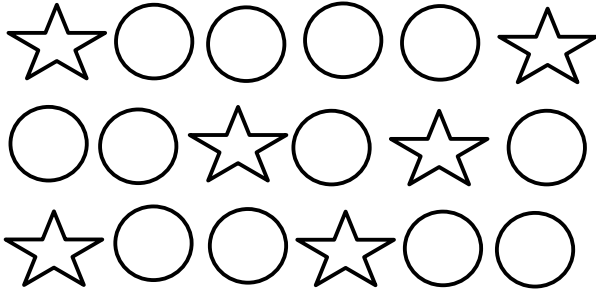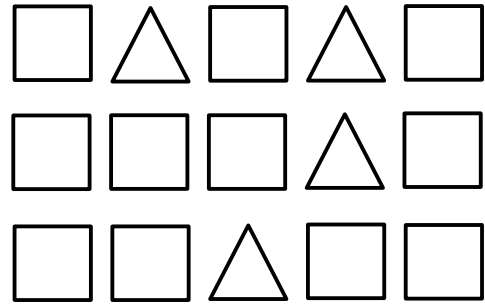
1:2 (or 6:12)

What is the ratio of squares to triangles?
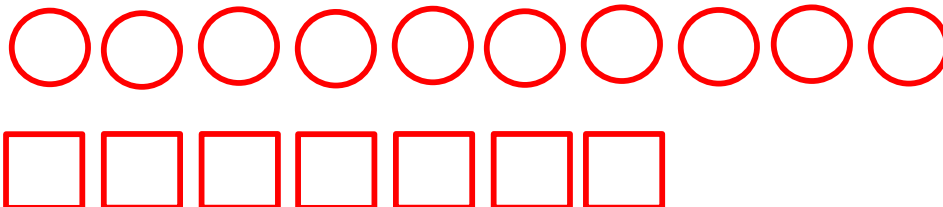
11:4

Circle which statements are true.
pencils = 8 erasers = 5

a) The ratio of pencils to erasers is 8:5.

b) For every 8 pencils there are 5 erasers.

c) For every 8 erasers there are 5 pencils.

d) The ratio or erasers to pencils is 8:5.

The ratio of tails to legs in the zebra exhibit was 1:4 because for every ___1___ tail there were ___4___ legs.

The ratio of cookies to eggs was 12 to 1, which means that ___36___ cookies could be made using 3 eggs.
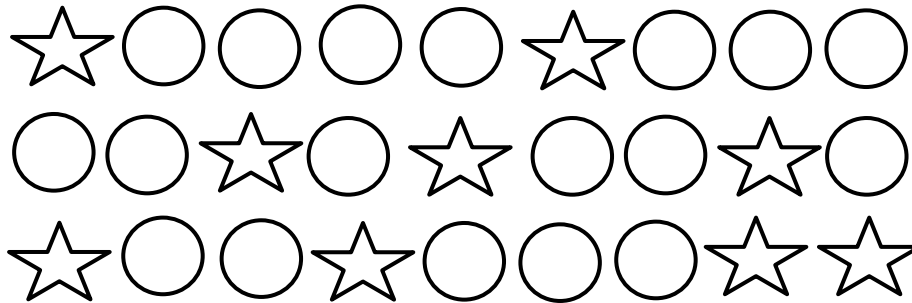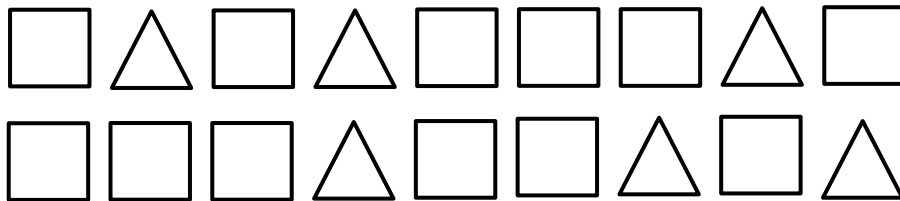
Draw a picture showing the ratio 10 circles to 7 squares.

Ratio Relationships

Directions: Solve each problem.

1. What is the ratio of stars to circles? _____ **9:18** _____

    ☆〇〇〇〇☆〇〇〇
    〇〇〇☆〇☆〇〇☆〇
    ☆〇〇☆〇〇〇〇☆☆

2. What is the ratio of squares to triangles? _____ **12:6** _____

    □△□△△□□□△□
    □□□△□□△□△

3. Write an example for the ratio 13:4.

    _____**Answers will vary.**_____
    **For every 13 students there are 4 laptops.**
    _____

4. Write an example for the ratio 5:9.
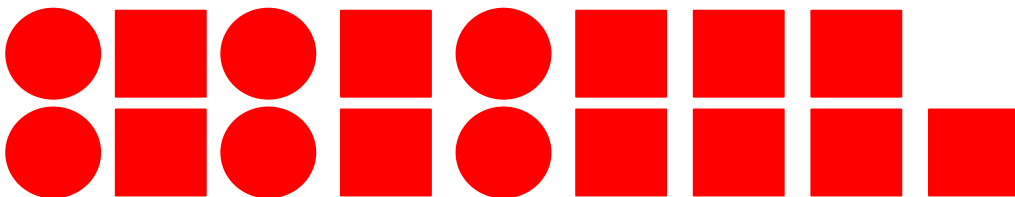
    _____**Answers will vary.**_____
    **For every 5 dogs there are 9 cats.**
    _____

Ratio Relationships

Directions: Solve each problem.

1. Circle which statements are true.
   cookies sold = 4 sodas sold = 9

   A. For every 9 cookies sold there are 4 sodas sold.
   B. The ratio of cookies to sodas sold is 4:9.
   C. For every 4 cookies sold there are 9 sodas sold.
   D. The ratio of cookies to sodas sold is 9:4.

2. Circle which statements are true.
   pencils = 15 erasers = 7

   A. For every 15 erasers there are 7 pencils.
   B. For every 15 pencils there are 7 erasers.
   C. The ratio of pencils to erasers is 15:7.
   D. The ratio or erasers to pencils is 15:7.

3. The ratio of eyes to legs in the zebra exhibit was 2:4 because for every
   _____**2**_____ eyes there were _____**4**_____ legs.

4. Draw a picture showing the ratio 6 circles to 11 squares.

Annie prepared 15 flower arrangements after working 3 hours. If Annie prepares flower arrangements at the same rate, how many hours would Annie have to work to prepare 35 flower arrangements?

7
_____

Renee knit a total of 39 centimeters of a scarf over 3 nights. How many nights will Renee have to spend knitting in order to knit a total of 65 centimeters of the scarf?

5
_____

Orville's Doughnuts sells a dozen doughnuts for $6.12. What is the unit cost per doughnut?

$0.51
_____

Howard earned a total of $12 by selling 8 cups of lemonade. How many cups of lemonade does Howard need to sell in all to earn $21?

14
_____

Theresa bought 18 postcards during 6 days of vacation. If she buys postcards at the same rate, how many total postcards will Theresa have bought after 9 days of vacation?

27
_____

Unit Rates

Directions: Solve each problem.

1. A baker made 35 pastries in 3 ½ hours. How many pastries did the baker make in one hour?

    _____ **10 pastries** _____

2. Vince earned $44 for mowing 4 lawns. What is the rate earned per lawn mowed?

    _____ **$11** _____

3. Tucker bikes 15 miles in 3 hours. How many miles does Tucker bike in 1 hour?

    5 miles; 12 minutes

4. A baker used 5 cups of flour to make 6 batches of cookies. He used ____ of **⅚** cup of flour to make 1 batch of cookies.

5. Stacy paid $54 for 6 pizzas, which is a rate of $__**9**__ per pizza.

Unit Rates

Directions: Solve each problem.

1. Cory's Doughnuts sells a dozen doughnuts for $4.92. What is the unit cost per doughnut?

   <u>   **41 cents**   </u>

2. Dorothy is buying chips at the grocery store. She needs to decide between Erik's chips that are $3.84 for a 12 oz. bag and Al's chips for $3.57 for a 8.5 oz. bag. Which chips are the better buy and by how much?

   Erik's chip; 10 cents per ounce
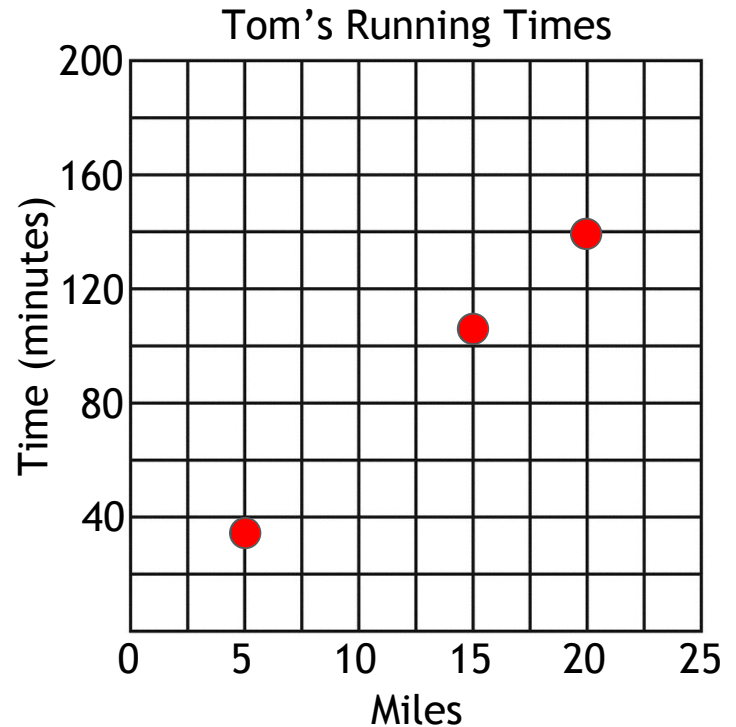
3. Clint completely filled his 18-gallon tank of gas with regular fuel for $55.08. As he left the gas station, he noticed the station across the street sold regular fuel priced at $2.99 per gallon. How much money could Clint have saved per gallon if he had gone to the station across the street?

   <u>   **$1.26**   </u>

4. A seamstress used 4 meters of ribbon to make 10 bows. She used <u>$\frac{2}{5}$</u> of a meter for each bow.

Tom runs cross country. He runs 5 miles in 35 minutes. He runs 20 miles in 140 minutes. If he keeps the same pace, how long will it take him to run 15 miles? Fill in the table with the missing time for the 15-mile run, and then graph the data.

Miles	Time (minutes)
5	35
15	**105**
20	140

Tom's Running Times

If it took 8 hours to mow 10 lawns, then at that rate, how many lawns could be mowed in 24 hours? What was the rate of lawns mowed per hour?

30, 1.25

There were 32 dogs and cats at the pet store. If 25% were cats, how many cats were at the pet store?

8

An elephant can drink 400 pints in a day. Given that there are 8 pints to one gallon, how many gallons of water can an elephant drink in one day?
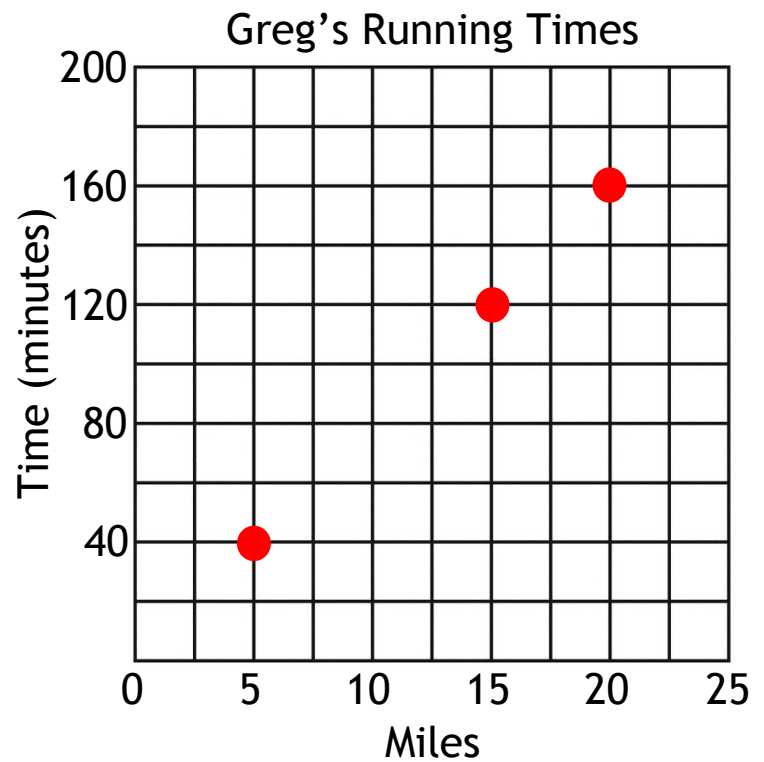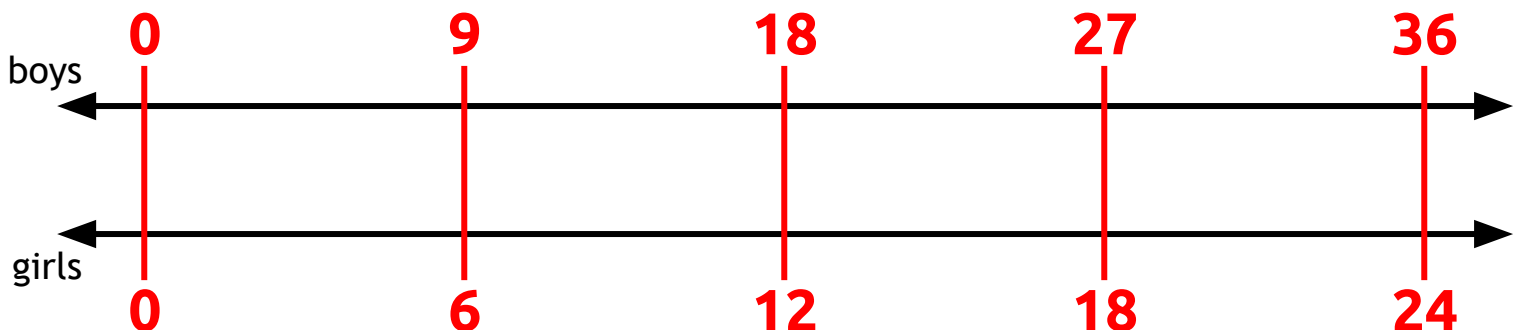
50

Real-World Ratios & Rates

Directions: Solve each problem.

1. Greg runs cross country. He runs 5 miles in 40 minutes. He runs 20 miles in 160 minutes. If he keeps the same pace, how long will it take him to run 15 miles? Fill in the table with the missing time for the 15-mile run, and then graph the data.

Miles	Time (minutes)
5	40
15	**120**
20	160

Greg's Running Times

2. Use the double number line to solve the problem.
The ratio of boys to girls in gym class was 9 to 6. If there were 36 boys, how many girls were in gym class? __**24 girls**__

boys: 0   9   18   27   36

girls: 0   6   12   18   24

Real-World Ratios & Rates

Directions: Solve each problem.

1. If it took 9 hours to mow 15 lawns, then at that rate, how many lawns could be mowed in 27 hours? What was the rate of lawns mowed per hour?

   45 lawns; 36 minutes per lawn

2. The grocery store charges $10.35 for 5 bags of oranges. If someone bought 9 bags of oranges, how much would it cost them?

   $18.63

3. There were 28 dogs and cats at the pet store. If 75% were cats, how many cats were at the pet store?

   21 cats

4. The average cow drinks 168 quarts of water each day. Given that there are 4 quarts to one gallon, how many gallons of water does the average cow drink?

   42 gallons