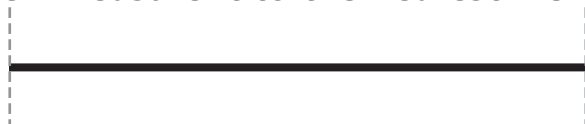


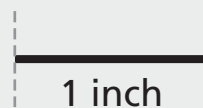
Homework

Estimate the length of the line segment in inches.
Then measure it to the nearest inch.

1.



Estimate: _____ Actual: _____



Estimate the length of the line segment in inches. Then
measure it to the nearest $\frac{1}{2}$ inch.

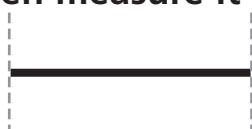
2.



Estimate: _____ Actual: _____

Estimate the length of each line segment in inches.
Then measure it to the nearest $\frac{1}{4}$ inch.

3.



Estimate: _____ Actual: _____

4.



Estimate: _____ Actual: _____

Draw a line segment that has the given length.

5. 4 inches

6. $3\frac{1}{4}$ inches7. $4\frac{1}{2}$ inches8. $\frac{3}{4}$ inch

9. Marta wants to make 4 necklaces that are the same length. She asks her friends to cut the string for the necklaces 15 paper clips long. Would all the lengths be the same? Explain your thinking.

Remembering

Solve each equation.

1. $4 \times 5 = \square$

2. $10 * 5 = \square$

3. $3 \bullet 5 = \square$

4. $2 * 5 = \square$

5. $1 \bullet 5 = \square$

6. $5 \times 9 = \square$

7. $5 \bullet 7 = \square$

8. $5 * 5 = \square$

9. $5 \times 6 = \square$

Solve each problem.

10. Tommy buys 6 notebooks. They cost \$3 each. How much does he spend?

11. Olivia has 42 muffins. She puts the same number of muffins into each of 6 baskets. How many muffins does Olivia put in each basket?

Solve each problem. Label your answers with the correct units.

12. Ms. Emerson has a rectangular shelf that is 5 feet long and 3 feet wide. What is the area of the shelf?

13. Trevor has a rectangular treasure box with an area of 72 square centimeters. If the length of one side is 9 centimeters, what is the length of the adjacent side?

14. **Stretch Your Thinking** Grace has a piece of string that is 8 inches long. She needs to cut the string into four equal pieces, but she does not have a ruler. Explain a way Grace can cut the string into four equal pieces.

Homework

Choose the best unit to measure how much each item can hold. Write *cup*, *pint*, *quart*, or *gallon*.

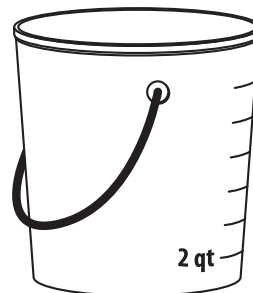
1. a bathtub _____
2. a container of orange juice _____
3. a juice box _____
4. a small milk carton _____

Use drawings to represent the problems.

5. Molly bought a container of lemonade that had 6 cups. She drank 2 cups. How many cups of lemonade does she have left?



6. Randy poured 8 quarts of water in a bucket. Then he added 4 more quarts. How many quarts of water are in the bucket?



Solve. Use drawings if you need to.

7. Mrs. Sanders buys 2 gallons of milk each week. How many gallons of milk will she buy in 10 weeks?

8. Brianna bought 64 fluid ounces of her favorite drink. How many 8 fluid-ounce glasses can she fill with the drink?

9. Brian's aquarium holds 16 gallons of water. He uses 2-gallon containers of water to fill the aquarium. How many containers does he use?

10. The Corner Market sold 24 pints of milk on Monday and 18 pints on Tuesday. How many pints of milk did the market sell on those two days?

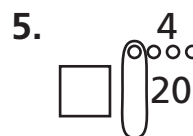
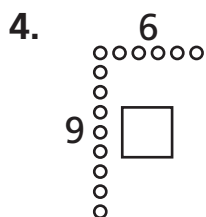
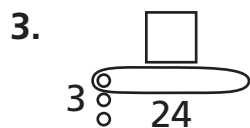
Remembering

Make a math drawing for the problem and label it with a multiplication equation. Then write the answer.

1. Coach Stevens puts 6 cones in each row for physical education class. He makes 4 rows. How many cones does Coach Stevens use?

2. Emily puts stickers in 8 bags, with 5 stickers per bag. How many stickers does Emily use?

Find the unknown number for each Fast Array drawing.



Estimate the length of the line segment in inches. Then measure it to the nearest $\frac{1}{2}$ inch.



Estimate: _____ Actual: _____

8. **Stretch Your Thinking** Write a word problem in which the answer is 6 gallons.

Homework

1 liter (L) = 1,000 milliliters (mL)

Circle the better estimate.

- | | |
|--|---------------------------------------|
| 1. a container of milk 2 L 20 mL | 2. a cup of punch 25 L 250 mL |
| 3. an eyedropper 1 L or 1 mL | 4. a jar of pickles 50 L 500 mL |

Choose the unit you would use to measure the liquid volume of each. Write *mL* or *L*.

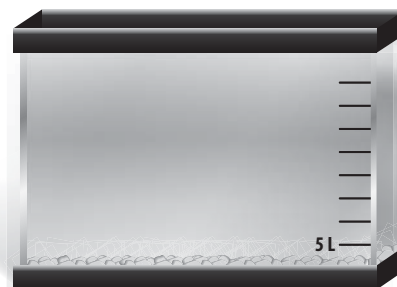
- | | |
|------------------------------|----------------------|
| 5. a container of glue _____ | 6. an aquarium _____ |
|------------------------------|----------------------|

Use the drawing to represent and solve the problem.

7. Dinah had a bottle of water that contained 800 milliliters of water. She used 500 milliliters. How much water is left in the bottle?
- _____



8. Galen has a fish tank that holds 40 liters of water. He poured 15 liters of water into the tank. How many more liters does he need to add to fill the tank?
- _____



Solve.

- | | |
|---|---|
| <p>9. Ben has 4 hummingbird feeders. Each feeder holds 80 milliliters of liquid hummingbird food. How many milliliters of liquid hummingbird food does Ben need?</p> <p>_____</p> | <p>10. Drew needs 27 liters of punch for a party. It comes in 3 liter containers. How many containers should Drew buy?</p> <p>_____</p> |
|---|---|

Remembering

Make a math drawing for the problem and label it with a multiplication equation. Then write the answer to the problem.

1. Kelly's garden has 6 rows of tulips. There are 5 tulips in each row. How many tulips are in her garden?

Solve. Then circle what type it is and what operation you used.

2. The area of the rectangular table is 18 square feet. The width of the table is 3 feet. What is its length?

3. The band lines up in 8 rows, with 6 band members in each row. How many band members are there in all?

array equal groups area
multiplication division

array equal groups area
multiplication division

Use the drawing to represent the problem.

4. Elizabeth buys a container of orange juice that has 8 cups. She pours 6 cups into a pitcher. How many cups are left in the container?

5. **Stretch Your Thinking** Write a word problem that involves subtracting 4 liters. Then solve. Draw a picture to represent your answer.



Homework

Choose the unit you would use to measure the weight of each object. Write *ounce* or *pound*.

1.



2.

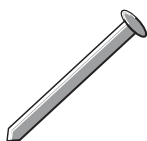


3.



Choose the unit you would use to measure the mass of each object. Write *gram* or *kilogram*.

4.



5.



6.



Circle the better estimate.

7. a pillow

8 oz

8 lb

8. a stapler

250 g

250 kg

9. a car

1,000 g

1,000 kg

10. a large book

3 lb

30 lb

Solve. Use a drawing if you need to.

11. Steve bought 24 ounces of his favorite cereal. He put equal amounts of the cereal in 4 containers. How many ounces did he put in each container?

12. Beth bought a bag filled with 340 grams of pasta. She used 250 grams. How many grams are left in the bag?

13. There are 8 books in a box. Each book has a mass of 2 kilograms. What is the total mass of the books?

14. Roy bought a 25-pound bag and a 10-pound bag of pet food. How many pounds of pet food did he buy?

Remembering

Write an equation and solve the problem.

1. The shoe store has a stack of 9 shoeboxes. Two shoes are in each box. How many shoes are in the stack?
- _____

2. Mrs. Rak's class has 35 students. Seven students sit at each table. How many tables of students are there?
- _____

Multiply or divide to find the unknown numbers.

3. $50 \div 10 = \square$

4. $2 * \square = 14$

5. $6 \overline{)54} = \square$

6. $6 \cdot 4 = \square$

7. $\frac{49}{7} = \square$

8. $\square \times 4 = 20$

Use drawings to represent the problems.

9. Meagan has a container that has 700 milliliters of milk. She uses 300 milliliters for a recipe. How much milk is left in the container?
- _____



10. Austin puts 5 liters of water in an empty bucket. Miles puts in another 8 liters. How much water is in the bucket now?
- _____



11. **Stretch Your Thinking** Explain how you know whether to choose grams or kilograms when measuring mass. Name an object you would measure using each unit.
- _____
- _____

Homework

Solve. Use drawings if you need to.

Show Your Work

1. Carlie had 800 milliliters of water in a container. She poured all but 300 milliliters into a vase. How many milliliters of water did Carlie pour into the vase?

2. Benji bought 2 potatoes that together have a mass of 496 grams. If one potato has a mass of 254 grams, what is the mass of the other potato?

3. An average sized duck egg has a mass of 80 grams. What would be the mass of three duck eggs?

4. Michelle has 4 buckets she uses to water plants. She filled each bucket with 6 liters of water. What is the total liquid volume of all the buckets?

5. A stack of books has a mass of 21 kilograms. If each book in the stack has a mass of 3 kilograms, how many books are in the stack?

6. Martha bought a liter of lemonade. She gave each of her 3 friends 300 milliliters. Did Martha use the whole liter of lemonade? Explain.

Remembering

Multiply or divide to find the unknown numbers.

1. $\frac{40}{8} = \square$

2. $5 * \square = 50$

3. $2 \overline{)10} = \square$

4. $6 \bullet 10 = \square$

5. $90 \div 10 = \square$

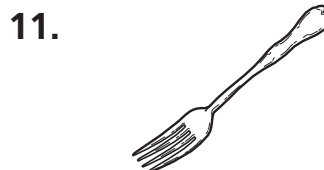
6. $\square \times 4 = 20$

Solve.

7. The valet parked 5 rows of cars in the parking lot. He put 5 cars in each row. How many cars did he park?
- _____

8. Charlie is making a mosaic picture using 1-centimeter square tiles. He places them in a square, 8 tiles wide by 8 tiles long. What is the area of the mosaic picture?
- _____

Choose the unit you would use to measure the weight of each object. Write *ounce* or *pound*.



12. **Stretch Your Thinking** Jake has 12 liters of water. Name four different ways he can divide the water into buckets so each bucket has the same number of liters.
- _____
- _____

Homework

Write the time on the digital clock. Then write how to say the time.

1.



2.



3.

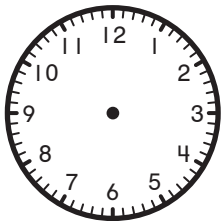


4.

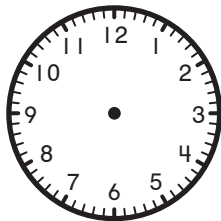


Draw the hands on the analog clock. Write the time on the digital clock.

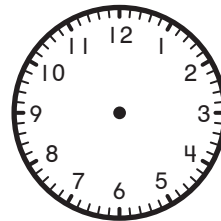
5. twenty-eight
minutes after four



6. six forty-five



7. quarter to seven



Write the time on the digital clock. Then write how to say the time.

8.



9.



10.



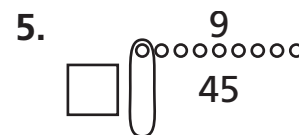
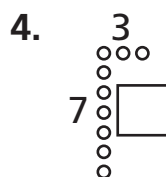
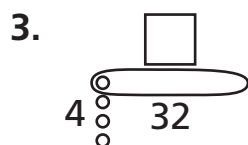
Remembering

Write an equation and solve the problem.

1. The pet store has 7 aquariums. There are 9 fish in each aquarium. How many fish in all are in the aquariums?
- _____

2. Declan has 81 dollar bills. He puts them in piles of 9. How many piles does he make?
- _____

Find the unknown number for each Fast Array drawing.



Solve.

6. LaDonna buys 2 grapefruits that together have a mass of 479 grams. If one grapefruit has a mass of 245 grams, what is the mass of the other grapefruit?
- _____

7. Harper fills 3 pots each with 4 liters of water. How many liters of water does he pour into the pots?
- _____

8. **Stretch Your Thinking** I am an hour that happens two times a day. My hands point in opposite directions. Both my hands point to a number on the clock. What hour am I?
- _____

Homework

Write the times as minutes *after* an hour and minutes *before* an hour.

1.



2.



3.



4.



5.



6.



7.



8.



9.



Remembering

Multiply or divide to find the unknown numbers.

1. $\frac{36}{9} = \square$

2. $40 \div 5 = \square$

3. $2 \cdot 7 = \square$

4. $7 \times 5 = \square$

5. $10 \overline{)90} = \square$

6. $10 * 8 = \square$

Write an equation to solve the problem.

7. Antonio is planting bean seeds. He puts 6 seeds in each row. There are 5 rows. How many bean seeds does he plant?
- _____

8. The baker made 56 fresh baked muffins. There are 8 muffins in each tin. How many tins did he use?
- _____

Write the time on the digital clock. Then write how to say the time.

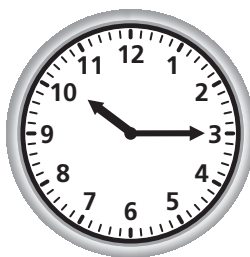
9.



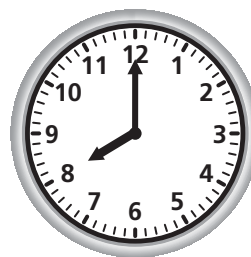
10.



11.



12.



13. **Stretch Your Thinking** List five different times in which the minutes before are the same as the minutes after the hour.
- _____

Homework**Complete.****1. Complete the table.**

| Start Time | Elapsed Time | End Time |
|------------|-------------------------|------------|
| 2:00 P.M. | | 10:00 P.M. |
| 2:27 A.M. | | 4:45 A.M. |
| 3:30 A.M. | 1 hour and 22 minutes | |
| 2:10 P.M. | 3 hours and 16 minutes | |
| | 2 hours and ten minutes | 11:00 A.M. |
| | 4 hours and 39 minutes | 7:53 P.M. |

Solve. Use your clock if you need to.

2. Liza left the library at 11:30 A.M. on Saturday.
She had been there for 1 hour and 25 minutes.
What time did she get to the library?

3. Andres spent from 4:15 P.M. to 5:05 P.M. doing
chores. How much time did Andres spend
doing his chores?

4. Arjun arrived at baseball practice at 5:15 P.M.
He practiced for 1 hour and 30 minutes.
What time did baseball practice end?

5. Today Sarah's piano lessons started at 4:15 P.M.
She was finished with her lessons at 5:10 P.M.
How long was Sarah at piano lessons?

Remembering

Multiply or divide to find the unknown numbers.

1. $\frac{30}{3} = \square$

2. $27 \div 9 = \square$

3. $2 \cdot 3 = \square$

4. $7 \times 9 = \square$

5. $5 \overline{)20} = \square$

6. $4 * 3 = \square$

Write an equation and solve the problem.

7. There are 36 students at the show. They sit in 4 equal rows. How many seats are in each row?

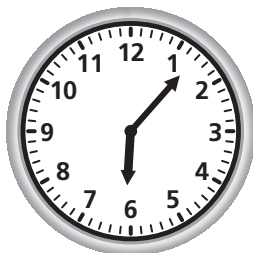
8. The music teacher set up 67 chairs for the concert. The principal set up 35 chairs for the concert. How many chairs in all did they set up?

Write the times as minutes *after* an hour and minutes *before* an hour.

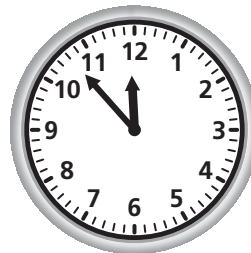
9.



10.



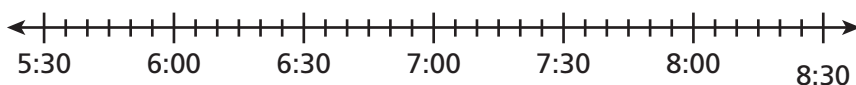
11.



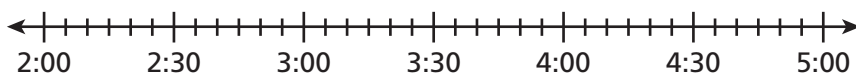
12. **Stretch Your Thinking** Write a word problem where something starts at 8:25 A.M. and ends at 1:43 P.M.

Homework**Solve using a number line.**

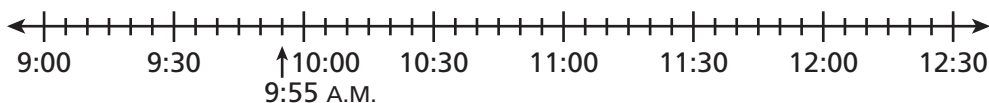
1. Terry began watching a movie at 5:45 P.M. The movie lasted 2 hours 20 minutes. Then Terry spent 25 minutes eating a snack. What time did Terry finish eating the snack?



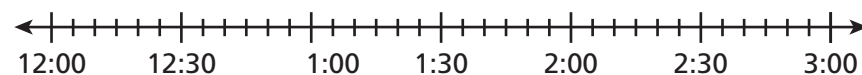
2. Evan left his friend's house at 5:00 P.M. He had been there 2 hours 15 minutes. At what time did Evan arrive at his friend's house?



3. Haley began reading her book at 9:55 A.M. She read for 1 hour 35 minutes. Then she spent 45 minutes doing homework. What time did Haley finish her homework?



4. Myra left home at 12:45 P.M. She spent 30 minutes eating lunch and 50 minutes watching a parade. Then it took her 15 minutes to drive home. What time did Myra return home?



Remembering

Make a rectangle drawing to represent each exercise.
Then find the product.

1. $6 \times 9 = \underline{\hspace{2cm}}$

2. $7 * 5 = \underline{\hspace{2cm}}$

3. $3 \bullet 6 = \underline{\hspace{2cm}}$

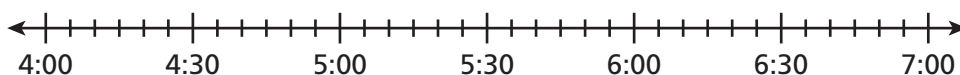
Write the first step question and answer.
Then solve the problem.

4. The baker makes 54 biscuits in the morning.
Then he makes 26 more in the afternoon.
He puts 10 biscuits in each bag. How many
bags does he fill?

5. Complete the table.

| Start Time | Elapsed Time | End Time |
|------------|--------------------|-----------|
| 9:32 A.M. | 1 hour 23 minutes | |
| 1:19 P.M. | | 5:37 P.M. |
| | 2 hours 45 minutes | 7:31 P.M. |

6. **Stretch Your Thinking** Write a two step time word problem using the number line in which the start time is 4:50. Use the number line below to show how to solve.



Homework

Solve. Use a clock or sketch a number line diagram if you need to.

1. Rhea arrived at the mall at 3:45 P.M. She spent 45 minutes having lunch and then she shopped for 55 minutes before leaving the mall. How much time did Rhea spend at the mall?

2. Mrs. Cox is baking a ham for dinner. It takes 1 hour 30 minutes to bake. The family eats at 6:15 P.M. What time should Mrs. Cox put the ham in the oven?

3. Dina started chores at 8:15 A.M. and finished at 9:05 A.M. It took her 30 minutes to clean her room and she spent the rest of the time bathing her dog. How long did Dina spend bathing her dog?

4. Jerry finished skating at 7:00 P.M. He skated for 1 hour 45 minutes. What time did he start skating?

5. Jason started his project at 2:30 P.M. and finished 2 hours and 15 minutes later. He spent 25 minutes doing research, 30 minutes writing a report, and the rest of the time building a model. What time did he finish his project? How much time did he spend building the model?

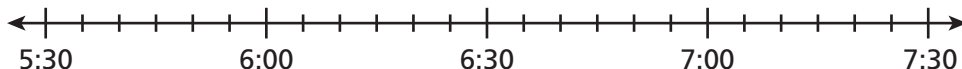
Remembering**Solve each problem.***Show Your Work*

1. The farmer makes stacks of 4 bales of hay. He makes 6 stacks. How many bales of hay does he stack?

2. Lilly has 85 shells in her collection. She gives 13 shells to her best friend. She puts the rest of her shells in groups of 9. How many groups does she make?

Solve.

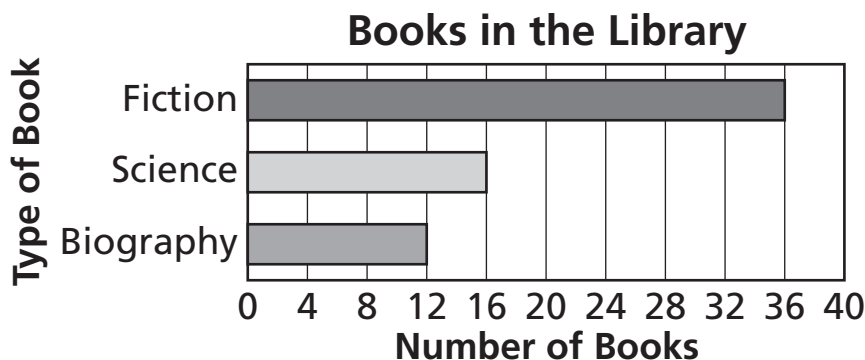
3. William and Hannah went to the bowling alley at 5:30 P.M. They bowled for 1 hour 20 minutes. Then they played a video game for 30 minutes. After the video game, they leave to go home. What time did they leave?



4. **Stretch Your Thinking** Tony is cooking dinner. He starts cooking at different times, so all the foods will be ready at the same time. The chicken takes 25 minutes to cook, the rice takes 40 minutes to cook, and the green beans take 15 minutes to cook. All the foods are finished at 5:33 P.M. At what time did he start cooking each food?

Homework

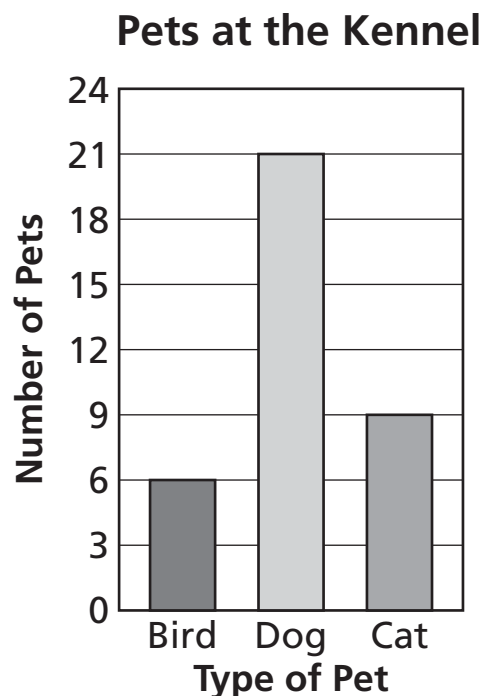
Use the horizontal bar graph to answer each question.



- How many fiction books are in the library? _____
- How many more science books are there than biographies? _____
- Write two of your own questions that can be answered using the graph.

Use the vertical bar graph to answer each question.

- How many cats and dogs are at the kennel? _____
- The kennel has the fewest of which type of pet? _____
- Write two of your own questions that can be answered using the graph.



Remembering

Multiply or divide.

1. $7 \times 3 = \underline{\hspace{2cm}}$

2. $4 \times \underline{\hspace{2cm}} = 20$

3. $81 \div 9 = \underline{\hspace{2cm}}$

4. $\frac{8}{2} = \underline{\hspace{2cm}}$

5. $5 \cdot 9 = \underline{\hspace{2cm}}$

6. $2 \times \underline{\hspace{2cm}} = 12$

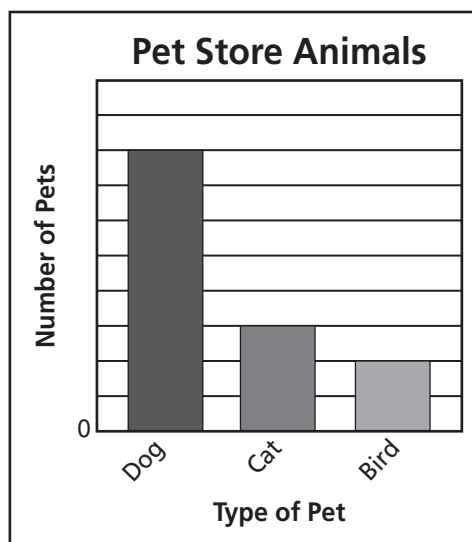
Write an equation and solve the problem.

7. The toy store receives a shipment of games.
There are 8 boxes. Each box has 20 games.
How many games are in the shipment?
- _____

Solve. Use a clock or sketch a number line diagram to help you.

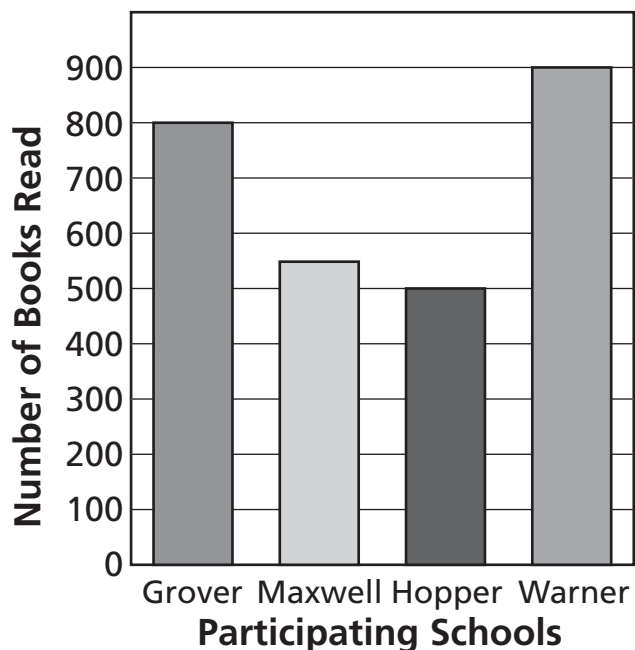
8. Emily arrives at school at 8:35 A.M. Together reading and math last for 1 hour 35 minutes. Then Emily goes to band practice for 45 minutes. What time does band practice end?
- _____

9. **Stretch Your Thinking** Use the graph at the right. If the pet store had 10 more birds, the number of dogs would be double the number of birds. What numbers should be on the scale? Explain how you solved.
- _____
- _____
- _____
- _____
- _____



Homework

Use the vertical bar graph to answer the questions.

Sunnytown Reading Festival

1. About how many books did students at Maxwell School read?

2. How many more books did students at Grover School read than students at Hopper School?

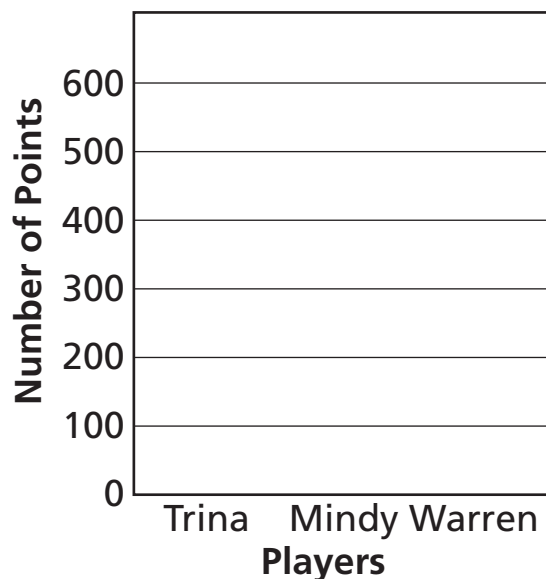
3. How many fewer books did students at Hopper School read than students at Warner School?

4. How many more books did the students at Maxwell need to read to have the same number of books as Warner?

5. Use the information in this table to make a vertical bar graph.

Pinball Scores

| Player | Points |
|--------|--------|
| Trina | 500 |
| Mindy | 350 |
| Warren | 200 |

Pinball Scores

Remembering

Multiply or divide to find the unknown numbers.

1. $16 = \underline{\hspace{2cm}} \times 4$

2. $\underline{\hspace{2cm}} = 4 \times 8$

3. $42 \div 7 = \underline{\hspace{2cm}}$

4. $8 = 56 \div \underline{\hspace{2cm}}$

5. $2 \times \underline{\hspace{2cm}} = 10$

6. $9 \times 3 = \underline{\hspace{2cm}}$

Use the horizontal bar graph to answer each question.

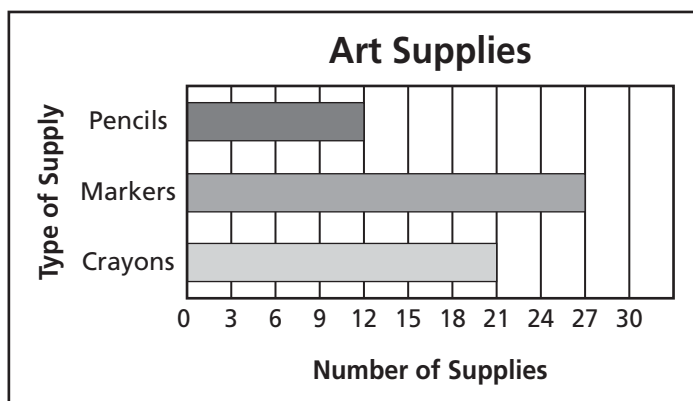
7. How many markers are there?

8. How many more crayons are there than pencils?

9. How many fewer pencils are there than markers?

10. Write your own question that can be answered using the graph.

11. **Stretch Your Thinking** Draw a Favorite Color horizontal bar graph in which red has 300 more votes than yellow, and blue has double the votes of red. Use a scale with an interval of 100.



Homework

Measure the lengths of 12 shoes at your home to the nearest $\frac{1}{2}$ inch. Record the data in the Tally Chart and then make a Frequency Table.

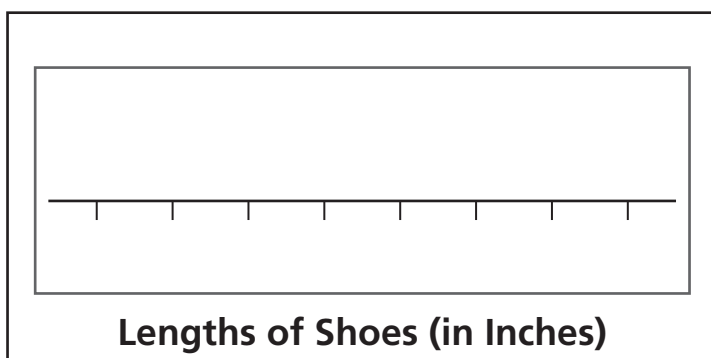
1.

| Tally Chart | |
|-------------|-------|
| Length | Tally |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

| Frequency Table | |
|-----------------|-------|
| Length | Tally |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Use the data above to make a line plot.

2.



Use the data displays to answer the questions.

3. What is the length of the shortest shoe? _____

4. What is the length of the longest shoe? _____

5. Which length appears the most often? _____

6. Write a question that can be answered using the data displayed on the line plot.

Remembering

Complete.

1. $9 + (3 \times 0) = \square$

2. $21 \times 1 = \square$

3. $4 \times (3 + 3) = \square$

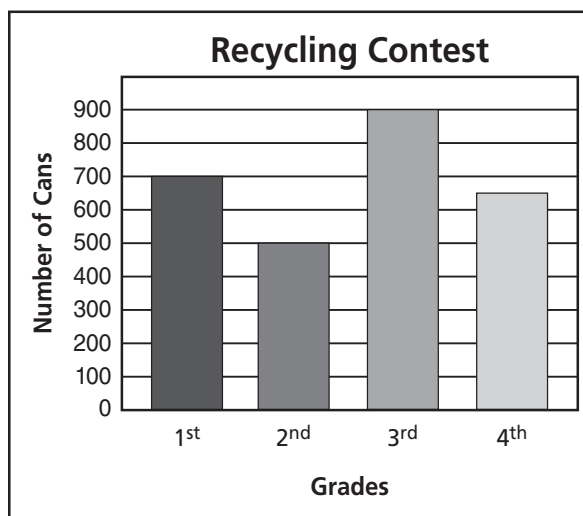
4. $3 \times (5 + 1) = \square$

5. $5 \times 9 = 9 \times \square = \square$

6. $(9 + 1) \times 3 = \square$

Use the vertical bar graph to answer the questions.

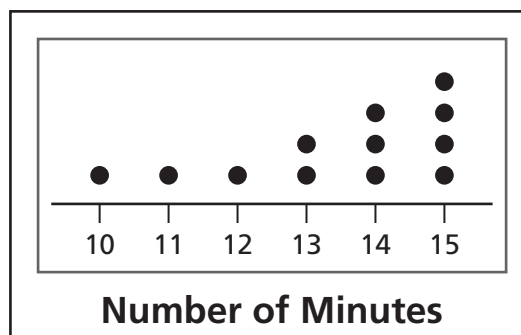
7. How many more cans did the 3rd grade collect than the 2nd grade? _____
8. How many fewer cans did the 2nd grade collect than the 1st grade? _____
9. About how many more cans would the 4th grade have to collect to have the same number as the grade with the most cans?



10. **Stretch Your Thinking** You need to find how many people drew a picture in less than 12 minutes. Which data display is easier to use to find the answer? Explain.

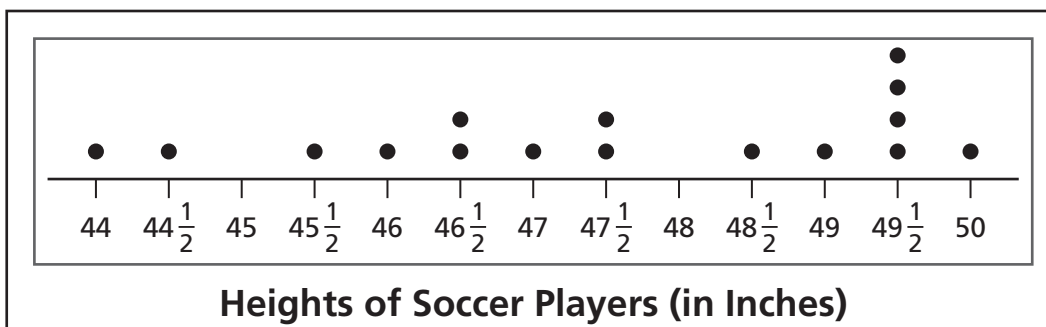
| Minutes to Draw Picture | | | |
|-------------------------|----|-------|----|
| Steve | 10 | Rob | 14 |
| Lauren | 12 | Nikki | 13 |
| Claudia | 14 | Jose | 15 |
| Erin | 15 | Tom | 15 |
| Joe | 13 | Helen | 11 |
| Greg | 15 | Tim | 14 |

Minutes to Draw a Picture



Homework

The coach of the girls' soccer team measured the heights of the players to the nearest $\frac{1}{2}$ inch. She recorded the heights in the line plot below.



Use the line plot to solve the problems.

- How many players are $47\frac{1}{2}$ inches tall?

- What is the difference in height between the tallest player on the team and the shortest player?

- What is the most frequent height?

- How many players are on the soccer team?

- Are there more players $47\frac{1}{2}$ inches tall and greater or less than $47\frac{1}{2}$ inches tall?

- How many more players are $49\frac{1}{2}$ inches than $46\frac{1}{2}$ inches tall?

Remembering

Write an equation and solve the problem.

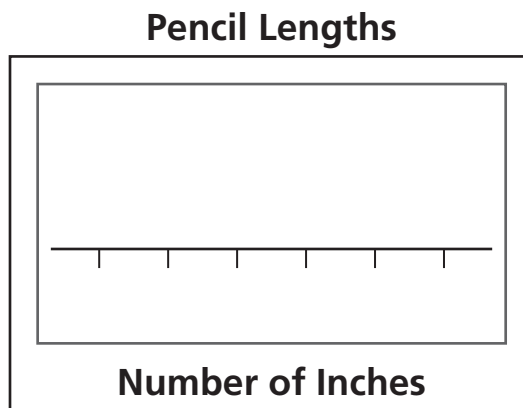
- Jon used 1-foot square tiles to cover his bathroom floor. The bathroom is 8 feet long and 10 feet wide. How many tiles did he use to cover his floor?

- The principal buys 42 red cups and 21 blue cups. She puts 7 cups on each table. How many tables will have cups?

Use the data below to make a line plot.

3.

| Lengths of Pencils in Inches | | | |
|------------------------------|----------------|---------|----------------|
| Lizzie | $7\frac{1}{2}$ | Carl | 6 |
| Mario | 5 | Aja | 6 |
| Jenn | $6\frac{1}{2}$ | Joe | $7\frac{1}{2}$ |
| Travis | 7 | Jung | 7 |
| Karen | 6 | Terrell | 7 |



4. **Stretch Your Thinking** You need to find the height of most third graders at your school. What type of data display would you use? Explain.
- _____
- _____
- _____

Homework

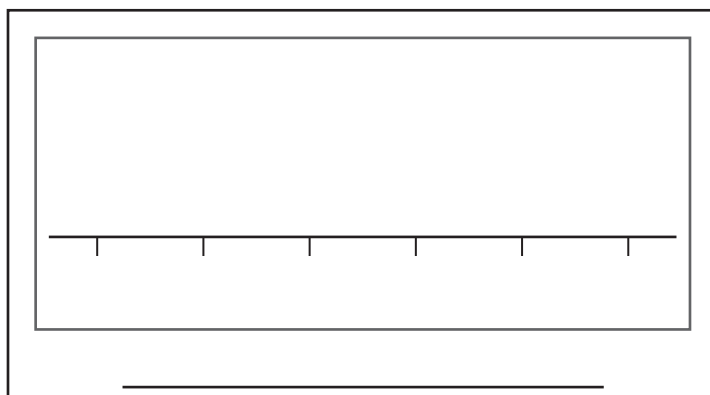
Measure the length of a smile of 10 different people to the nearest $\frac{1}{2}$ inch.

1. Record the lengths in the box below.

| |
|--|
| |
| |
| |
| |
| |
| |
| |
| |
| |
| |

2. Organize the measurement data in a frequency table and a line plot.

| Frequency Table | |
|-----------------|-------|
| Length | Tally |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |

Line Plot

3. Describe what your line plot shows.

Remembering

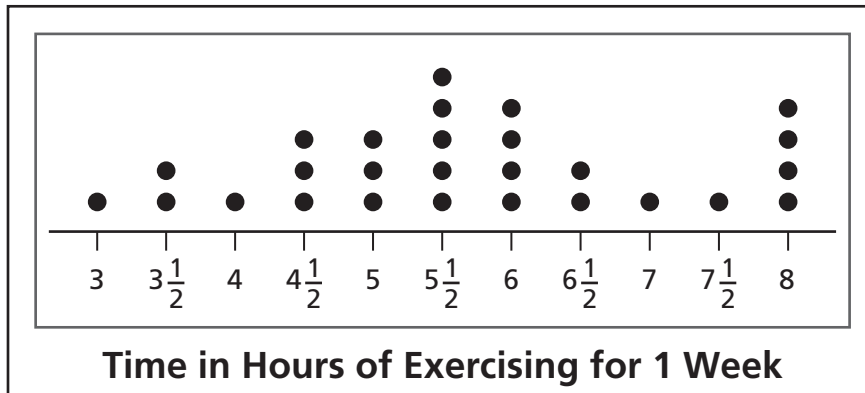
Write an equation and solve the problem.

1. There are 72 skateboards in the shop. If Todd sells 8 each day, how many days will it take him to sell all of the skateboards?
- _____

Complete.

2. $36 = \underline{\hspace{1cm}} \times 4$ 3. $\underline{\hspace{1cm}} \times 9 = 81$ 4. $\underline{\hspace{1cm}} = 54 \div 6$

Use the line plot to solve the problems.



5. How many people exercised for 6 hours?
- _____
6. Did more people exercise less than 5 hours or more than 6 hours?
- _____
7. **Stretch Your Thinking** What can you conclude about the data in the line plot?
- _____
- _____