

# Summer Week 1 Grade 6H Day 1

1. Fill in the missing number:

$$\begin{array}{r} 10 \\ \times 38 \\ \hline \square \square \\ + 300 \\ \hline 380 \end{array}$$

2. Fill in the missing number:

$$\begin{array}{r} 70 \\ \times 72 \\ \hline 140 \\ + 4,900 \\ \hline \square, \square \square \end{array}$$

3. Fill in the missing number:

$$\begin{array}{r} 12 \\ \times 14 \\ \hline 48 \\ + \square \square \square \\ \hline 168 \end{array}$$



7. Read the story.

Julie bought 3 bags of tomatoes so she could make her favorite mozzarella and tomato appetizer. Each bag had 5 tomatoes in it.

Which expression tells you how many tomatoes Julie bought?

$$3 + 5$$

$$3 \times 5$$

8. Read the story.

Howard High School has 15 hallways, and each hallway has 60 lockers. Right now, 12 lockers are broken.

Which expression tells you the total number of working lockers?

$$(15 \times 60) + 12$$

$$(15 \times 60) - 12$$

9. Read the story.

A pet store has 100 fish split evenly among 4 big fish tanks.

Which expression tells you how many fish are in each fish tank?

$$100 \div 4$$

$$100 \times 4$$

10. Read the story.

During a special sale, Oscar bought 3 packs of 24 crayons and got a 12-pack of crayons for free.

Which expression tells you the total number of crayons that Oscar got?

$$(3 \times 24) - 12$$

$$(3 \times 24) + 12$$

# Summer Week 1 Grade 6H Day 2

1. Complete the sentence.

is 10 times as much as 0.037.

---

2. Complete the sentence.

is 10 times as much as 0.081.

---

3. Complete the sentence.

is 10 times as much as 0.26.

---

4. Complete the sentence.

is 10 times as much as 0.083.

---

5. Complete the sentence.

is 10 times as much as 0.017.

---

6. Tori spent \$234 on new clothes at a department store. She spent the same amount on jeans as on shoes. She spent twice as much on sweaters as on jeans. She spent 3 times as much on shoes as on belts.

How much money did Tori spend on sweaters?

\$

7. On an overnight camping trip, the Adventure Scouts could choose to sleep in a cabin, in a tent, or outside under the stars. A total of 115 scouts went on the trip. Twice as many scouts slept in a cabin as slept in a tent. The same number of scouts slept outside as slept in a cabin.

How many Adventure Scouts slept outside?

scouts

8. Brianna's Bakery offers 3 flavors of bagels. Customers can choose from plain, cinnamon, or blueberry bagels. Yesterday, a customer ordered 144 bagels for a company meeting. The order was for twice as many blueberry bagels as plain bagels and 3 times as many cinnamon bagels as blueberry bagels.

How many cinnamon bagels did the customer order?

cinnamon bagels

9. The hot-lunch program at River Valley School offers white milk, chocolate milk, or strawberry milk with each lunch. Yesterday, 217 children got milk with lunch. Twice as many chose chocolate milk as chose strawberry milk. Also, twice as many chose white milk as chose chocolate milk.

How many children chose white milk?

children

10. Jacob, Braden, Darnell, and Manny are entered as a team in an obstacle course race. Altogether, the team will race 1,760 yards. Jacob will race twice as many yards as Manny. Braden will race twice as many yards as Jacob. Darnell will race the same number of yards as Braden.

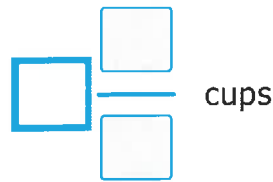
How many yards will Braden race in the relay?

yards



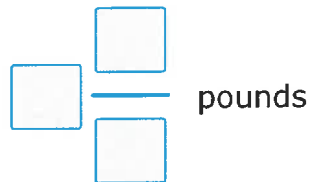
# Summer Week 3 Grade 6H Day 3

1. In making macaroni and cheese, Amanda used  $1\frac{2}{3}$  cups of cheddar and  $2\frac{1}{6}$  cups of parmesan. How much cheese did Amanda use in all?



The diagram shows a mixed number structure with three empty boxes. One box is on the left of a horizontal fraction bar, and two boxes are stacked vertically on the right of the bar. The word "cups" is written to the right of the fraction bar.

2. The Corner Cafe had  $10\frac{1}{2}$  pounds of white sugar and  $1\frac{3}{5}$  pounds of brown sugar left at the end of a very busy day. How much sugar did The Corner Cafe have in all?



The diagram shows a mixed number structure with three empty boxes. One box is on the left of a horizontal fraction bar, and two boxes are stacked vertically on the right of the bar. The word "pounds" is written to the right of the fraction bar.

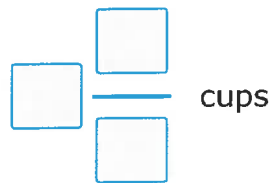
3. A school made  $16\frac{1}{3}$  gallons of fruit punch for Parents' Night. Parents and teachers drank only  $11\frac{11}{12}$  gallons altogether that night. How many gallons of fruit punch did the school have left?

$$\boxed{\phantom{00}} \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} \text{ gallons}$$

4. Planet X is  $4\frac{1}{2}$  light-years away from Earth. Planet Y is  $\frac{2}{3}$  of a light-year away from Earth. How much farther away is Planet X?

$$\boxed{\phantom{00}} \frac{\boxed{\phantom{00}}}{\boxed{\phantom{00}}} \text{ light-years}$$

5. Josh filled a measuring cup with  $2\frac{1}{6}$  cups of vegetable oil. Then he poured  $\frac{1}{2}$  of a cup of the oil into a frying pan. How much oil is left in the measuring cup?



6. Which expression will give a better whole-number estimate for  $714 \div 88$ ?

$800 \div 40$

$720 \div 90$

Use the expression you picked to estimate the quotient.

$714 \div 88$  is about .

7. Which expression will give a better whole-number estimate for  $804 \div 38$ ?

$800 \div 40$

$810 \div 90$

Use the expression you picked to estimate the quotient.

$804 \div 38$  is about .

8. Which expression will give a better whole-number estimate for  $611 \div 13$ ?

$600 \div 10$

$600 \div 30$

Use the expression you picked to estimate the quotient.

$611 \div 13$  is about .

9. Which expression will give a better whole-number estimate for  $3,029 \div 34$ ?

$3,100 \div 30$

$3,000 \div 30$

Use the expression you picked to estimate the quotient.

$3,029 \div 34$  is about .

10. Which expression will give a better whole-number estimate for  $386 \div 48$ ?

$380 \div 50$

$400 \div 50$

Use the expression you picked to estimate the quotient.

$386 \div 48$  is about .

# Summer Week 1 Grade 6H Day 4

1. An FM radio station's number tells you the frequency of its radio waves. Radio stations use different frequencies so they don't broadcast over each other. This table shows the frequencies for some radio stations.

Radio station	Frequency (megahertz)
Radio Rock	99.1
Country Classics	99.7
Hip Hop Vibe	98.9
Pop Parade	98.5

Which statement is true?

Hip Hop Vibe broadcasts at a lower frequency than Pop Parade.

Radio Rock broadcasts at a higher frequency than Country Classics.

Hip Hop Vibe broadcasts at a higher frequency than Country Classics.

Radio Rock broadcasts at a higher frequency than Pop Parade.

2. Weather records keep track of high and low temperatures in a region. This table shows the record high temperatures for several countries in Europe.

Country	Record high temperature (°C)
Moldova	42.4
Croatia	42.8
Germany	42.6

Which list shows the countries in order from hottest to coldest record high temperature?

Croatia, Germany, Moldova

Croatia, Moldova, Germany

Moldova, Germany, Croatia

3. Latitude is a way to describe how far north or south of the equator a place is located. This table shows the latitude for some cities that are north of the equator.

City	Latitude (°N)
Munich, Germany	48.135
Paris, France	48.857
Vienna, Austria	48.208
Bratislava, Slovakia	48.149

Which statement is true?

Bratislava is closer to the equator than Paris.

Paris is closer to the equator than Vienna.

Bratislava is farther from the equator than Vienna.

Munich is farther from the equator than Bratislava.

4. Kaylee loves to cook pasta. Different shapes of pasta require different cooking times due to their thicknesses. This table shows the thicknesses of several shapes of pasta.

Shape of pasta	Thickness (inches)
spaghetti	0.076
vermicellini	0.071
fidellini	0.058

Which list shows the shapes of pasta in order from thinnest to thickest?

vermicellini, spaghetti, fidellini

fidellini, vermicellini, spaghetti

spaghetti, fidellini, vermicellini

5. Marshall is ordering pudding cups for the school cafeteria's lunch program. He wants to find the least expensive pudding to order. This table shows the names and costs per ounce for several brands of pudding.

Brand name	Cost per ounce (\$)
O'Leary	0.06
Bowman	0.07
Lil' Jen	0.11

Which brand of pudding costs the least per ounce?

O'Leary

Bowman

Lil' Jen

6. Wyatt uses  $\frac{3}{5}$  of a cup of vinegar in his salad dressing recipe. How much vinegar would Wyatt use to make  $\frac{3}{5}$  of a recipe?

*Write your answer as a fraction or as a whole or mixed number.*

cups

7. Of the students in the band,  $\frac{2}{3}$  play a brass instrument. Of the students who play a brass instrument,  $\frac{1}{2}$  play the trumpet. What fraction of the students in the band play the trumpet?

*Write your answer as a fraction or as a whole or mixed number.*

of the students

8. Sofia had  $\frac{2}{5}$  of a pound of blueberries. Sofia let her friend Porter eat  $\frac{1}{5}$  of the blueberries. How many pounds of blueberries did Porter eat?

*Write your answer as a fraction or as a whole or mixed number.*

pounds

9. Savannah has  $\frac{3}{5}$  of a cup of powdered sugar. She sprinkles  $\frac{1}{5}$  of the sugar onto a plate of brownies and sprinkles the rest onto a plate of lemon cookies. How much sugar does Savannah sprinkle on the brownies?

*Write your answer as a fraction or as a whole or mixed number.*

cups

10. Of the cakes at Cindy's Bakery,  $\frac{5}{8}$  have chocolate frosting. Of the cakes with chocolate frosting,  $\frac{4}{5}$  have raspberry filling. What fraction of the cakes at Cindy's Bakery have both chocolate frosting and raspberry filling?

*Write your answer as a fraction or as a whole or mixed number.*

of the cakes

# Summer Week 1 Grade 6H Day 5

1. Find the missing number.

$$\boxed{\phantom{000}} \div 74 = 13$$

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2. Find the missing number.

$$2,244 \div \boxed{\phantom{000}} = 66$$

---

3. Find the missing number.

$$2,795 \div 65 = \boxed{\phantom{000}}$$

---

4. Find the missing number.

$$\boxed{\phantom{000}} \div 35 = 22$$

---

5. Find the missing number.

$$1,000 \div 25 = \boxed{\phantom{000}}$$

---

6. Chandler opened a savings account with \$75. The next month, he deposited \$34.60 that he found in his coat pocket. A few weeks later, Chandler deposited his paycheck of \$78.65. Then, Chandler made \$213.78 from delivering newspapers, and he deposited all of it into his savings account as well. What is Chandler's balance now?

\$

7. Mandy bought some dog treats to donate to the animal shelter. She paid with 2 five-dollar bills, 1 one-dollar bill, 2 quarters, and 1 nickel. The cashier gave Mandy \$0.04 in change. How much did the dog treats cost?

\$

8. Kiara has \$250.76 in her savings account. She also has 3 ten-dollar bills, 3 five-dollar bills, 3 quarters, and 4 pennies in her purse. How much money does Kiara have in all?

\$

9. Susan goes to the diner for breakfast. She orders the country breakfast for \$11.79 and a glass of apple juice for \$2.49. She has a coupon for \$3 off her meal. How much does Susan pay in all?

\$

10. Last week, Caden had \$58.60 in his checking account. This week, he deposited the \$75 he earned mowing some neighbors' lawns. Then, he used his debit card to buy a new sweatshirt for \$45.76. He also deposited a check for \$10 that he earned from walking dogs. What is Caden's balance now?

\$

# Summer Week 2 Grade 6H Day 1

1. Divide.

$$2 \div \frac{1}{6} = \boxed{\phantom{000}}$$

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2. Divide.

$$\frac{1}{2} \div 3 = \boxed{\phantom{000}}$$

---

3. Divide.

$$3 \div \frac{1}{2} = \boxed{\phantom{000}}$$

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4. Divide.

$$2 \div \frac{1}{4} = \boxed{\phantom{000}}$$

---

5. Divide.

$$\frac{1}{2} \div 2 = \boxed{\phantom{000}}$$

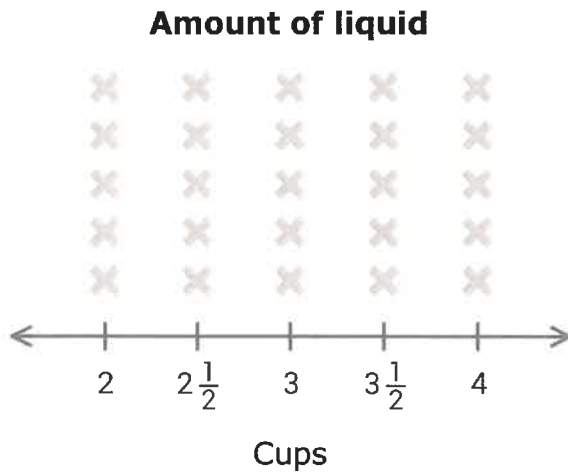
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6. Mrs. Boyer's science class put different amounts of liquid into some glass beakers.

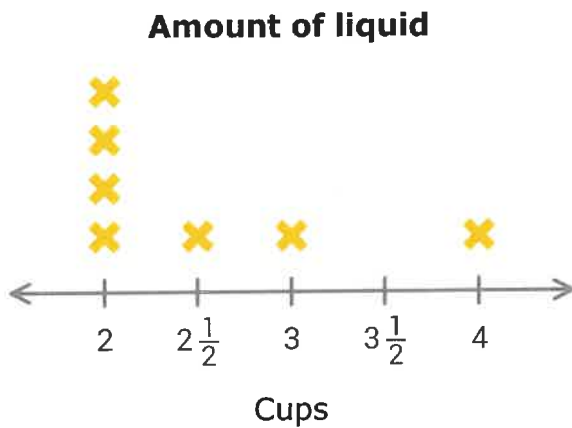
Amount of liquid (cups)						
$2\frac{1}{2}$	2	2	2	4	2	3

Use the data in the list to complete the line plot below.

*Click to select the X's. To clear a column, click on the number line below it.*



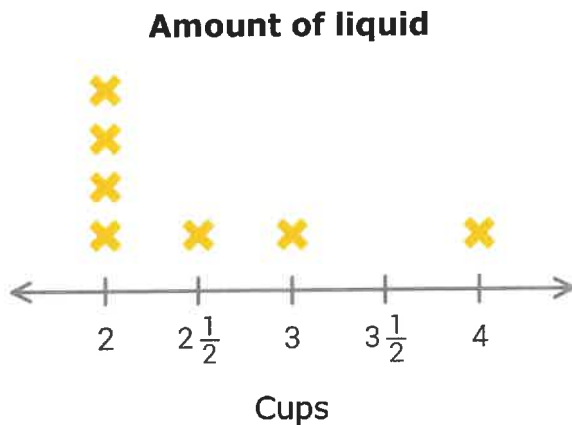
7. Mrs. Boyer's science class put different amounts of liquid into some glass beakers. Use the line plot to answer the question below.



How many beakers contain more than  $2\frac{1}{2}$  cups but less than 4 cups of liquid?

beakers

8. Mrs. Boyer's science class put different amounts of liquid into some glass beakers. Use the line plot to answer the question below.

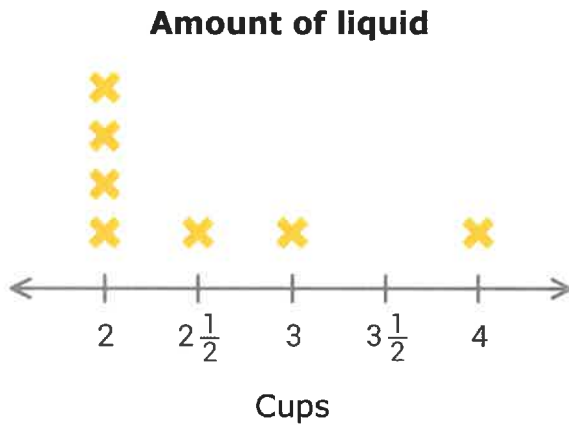


If you combine all of the beakers containing 2 cups of liquid, how much liquid will you have in all?

Write your answer as a fraction, mixed number, or whole number.

cups

9. Mrs. Boyer's science class put different amounts of liquid into some glass beakers. Use the line plot to answer the question below.



What is the total amount of liquid in the beakers?

*Write your answer as a fraction, mixed number, or whole number.*

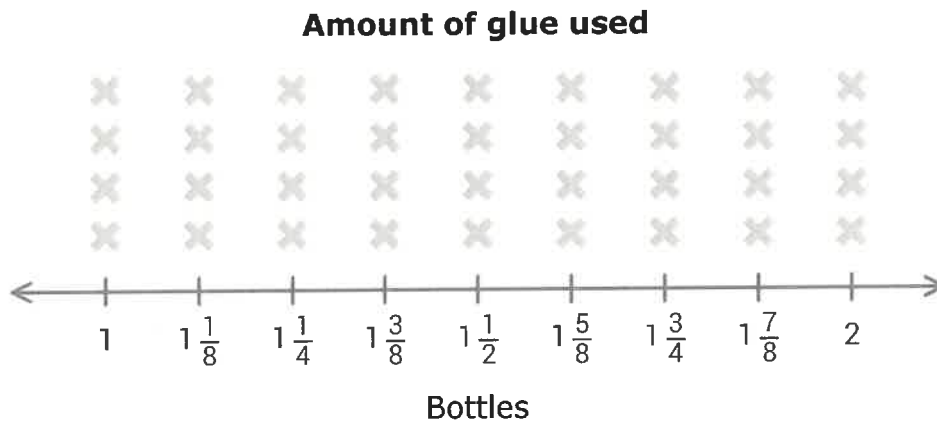
cups

10. On the first day of summer camp, campers worked in teams to build a tower with popsicle sticks using as little glue as possible. After they were done, the counselors measured how much glue each team used.

Amount of glue used (bottles)					
$1\frac{3}{8}$	$1\frac{1}{2}$	2	$1\frac{7}{8}$	$1\frac{1}{2}$	$1\frac{1}{2}$

Use the data in the list to complete the line plot below.

*Click to select the X's. To clear a column, click on the number line below it.*





# Summer Week 2 Grade 6H Day 2

1. Terrell loves to use chicken-flavored seasoning cubes when he cooks. Each cube has a volume of one cubic centimeter. Terrell stores the cubes in a plastic container shaped like a rectangular prism with a height of 5 centimeters. The bottom of the container can be completely covered by a layer of 40 cubes. What is the volume of the entire container?

cubic centimeters

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2. At the candy store, Carly buys caramel cubes in a box shaped like a rectangular prism. Each caramel has a volume of 1 cubic centimeter. When Carly opens the box, she sees a layer of 24 caramels filling the top of the box. If the box has 4 layers of caramels in all, what is its volume?

cubic centimeters

---

3. Hanson is stacking plastic cubes in a crayon box that is shaped like a rectangular prism. The box has a volume of 12 cubic inches. The cubes each have a volume of one cubic inch. Hanson covers the bottom of the crayon box with a layer of 4 cubes. How many layers will completely fill it?

layers

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4. Layla makes necklaces out of cube-shaped beads. Each bead has a volume of one cubic centimeter. She keeps the beads in a jewelry box that is shaped like a rectangular prism. The jewelry box has a height of 6 centimeters. The bottom of the jewelry box can be completely covered by a layer of 60 beads. What is the volume of the jewelry box?

cubic centimeters

5. Bryan placed his plastic measuring blocks in a box that is shaped like a rectangular prism. The blocks are shaped like cubes, and each block has a volume of one cubic inch. Bryan completely covered the bottom of the box with a layer of 42 blocks. What is the volume of the box if 5 layers of blocks will fill it entirely?

cubic inches

6. Kenji has flowers planted in 4 different areas in his backyard. He has  $\frac{1}{4}$  of a bag of fertilizer and uses an equal amount for each area. How many bags of fertilizer can he use in each area?

*Write your answer as a fraction or a whole number.*

7. For the school food drive, Brandon is packing cans of soup into a box. Each can weighs  $\frac{1}{2}$  of a pound and the box can safely hold 6 pounds without breaking. How many cans can Brandon pack into the box?

*Write your answer as a fraction or a whole number.*

8. Yesterday, Diego's Snack Shack went through 4 bottles of ketchup. If they used  $1\frac{2}{5}$  times as much mustard as ketchup, how many bottles of mustard did they go through?

*Write your answer as a fraction or as a whole or mixed number.*

bottles

9. Lily is adding sprinkles to the top of some ice cream sundaes she made for her parents. She has  $\frac{1}{8}$  of a cup of sprinkles to use equally over 2 sundaes. How many cups of sprinkles does she put on each sundae?

*Write your answer as a fraction or a whole number.*

10. Sanjay buys 5 small bottles of mango juice from the grocery store. He plans on drinking  $\frac{1}{2}$  of a bottle every morning when he has breakfast. How many days will the mango juice last for?

*Write your answer as a fraction or a whole number.*



# Summer Week 2 Grade 6H Day 3

1. Divide.

$$80.6 \div 6.2 = \boxed{\phantom{000}}$$

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2. Divide.

$$45.9 \div 5.1 = \boxed{\phantom{000}}$$

---

3. Divide.

$$\begin{array}{r} \boxed{\phantom{00}} \\ 0.06 \overline{) 3.72} \end{array}$$

---

4. Divide.

$$0.54 \div 0.06 = \boxed{\phantom{000}}$$

---

5. Divide.

$$0.99 \div 0.11 = \boxed{\phantom{000}}$$

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6. Sally tried to evaluate the expression  $[8 + 6 \times (20 - 18)] \div 4$ . Here is her work:

$$\begin{aligned} & [8 + 6 \times (20 - 18)] \div 4 \\ = & [14 \times (20 - 18)] \div 4 && \text{Step 1} \\ = & [14 \times 2] \div 4 && \text{Step 2} \\ = & 28 \div 4 && \text{Step 3} \\ = & 7 && \text{Step 4} \end{aligned}$$

Is Sally's work correct?

No, Sally made a mistake in Step 1. Sally should have done the operation inside the parentheses first. The order of operations says to start with parentheses and do brackets next.

No, Sally made a mistake in Step 2. Sally should have multiplied instead of subtracting. The order of operations says to multiply before you subtract.

Yes, Sally's work is correct.

7. Aisha tried to evaluate the expression  $45 - 27 \div (4 + 5)$ . Here is her work:

$$45 - 27 \div (4 + 5)$$

$$= 18 \div (4 + 5) \quad \text{Step 1}$$

$$= 18 \div 9 \quad \text{Step 2}$$

$$= 2 \quad \text{Step 3}$$

Is Aisha's work correct?

No, Aisha made a mistake in Step 1. Aisha should have started with the parentheses. Operations inside parentheses need to be done first.

No, Aisha made a mistake in Step 2. Aisha should have divided before she added. The order of operations says to divide before you add.

Yes, Aisha's work is correct.

8. Whitney tried to evaluate the expression  $50 \div (12 - 2) \times 8$ . Here is her work:

$$\begin{aligned} & 50 \div (12 - 2) \times 8 \\ &= 50 \div 10 \times 8 && \text{Step 1} \\ &= 5 \times 8 && \text{Step 2} \\ &= 40 && \text{Step 3} \end{aligned}$$

Is Whitney's work correct?

No, Whitney made a mistake in Step 1. Whitney subtracted before she multiplied. The order of operations says to multiply before you subtract.

No, Whitney made a mistake in Step 2. Whitney divided before she multiplied. The order of operations says to multiply before you divide.

Yes, Whitney's work is correct.

9. Fernando tried to evaluate the expression  $17 - (20 + 7) \div 9$ . Here is his work:

$$\begin{aligned} & 17 - (20 + 7) \div 9 \\ & = 17 - 27 \div 9 && \text{Step 1} \\ & = 17 - 3 && \text{Step 2} \\ & = 14 && \text{Step 3} \end{aligned}$$

Is Fernando's work correct?

No, Fernando made a mistake in Step 1. Fernando added before he divided. The order of operations says to divide before you add.

No, Fernando made a mistake in Step 2. Fernando worked from right to left. The order of operations says to work from left to right.

Yes, Fernando's work is correct.

10. Estelle tried to evaluate the expression  $27 - (8 - 3) \times 4$ . Here is her work:

$$27 - (8 - 3) \times 4$$

$$= 27 - 5 \times 4 \quad \text{Step 1}$$

$$= 22 \times 4 \quad \text{Step 2}$$

$$= 88 \quad \text{Step 3}$$

Is Estelle's work correct?

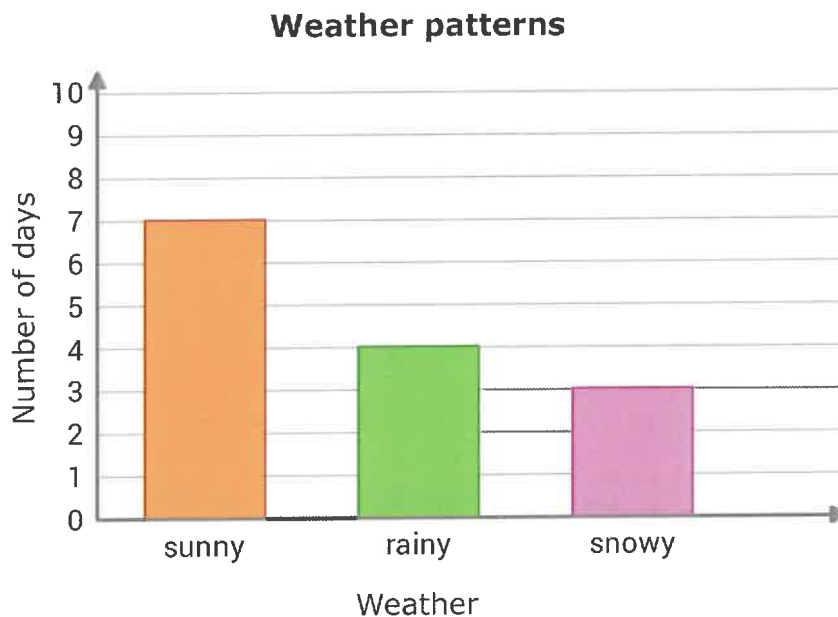
No, Estelle made a mistake in Step 1. Estelle should have multiplied instead of subtracting. The order of operations says to multiply before you subtract.

No, Estelle made a mistake in Step 2. Estelle should have multiplied before she subtracted. The order of operations says to multiply before you subtract.

Yes, Estelle's work is correct.

# Summer Week 2 Grade 6H Day 4

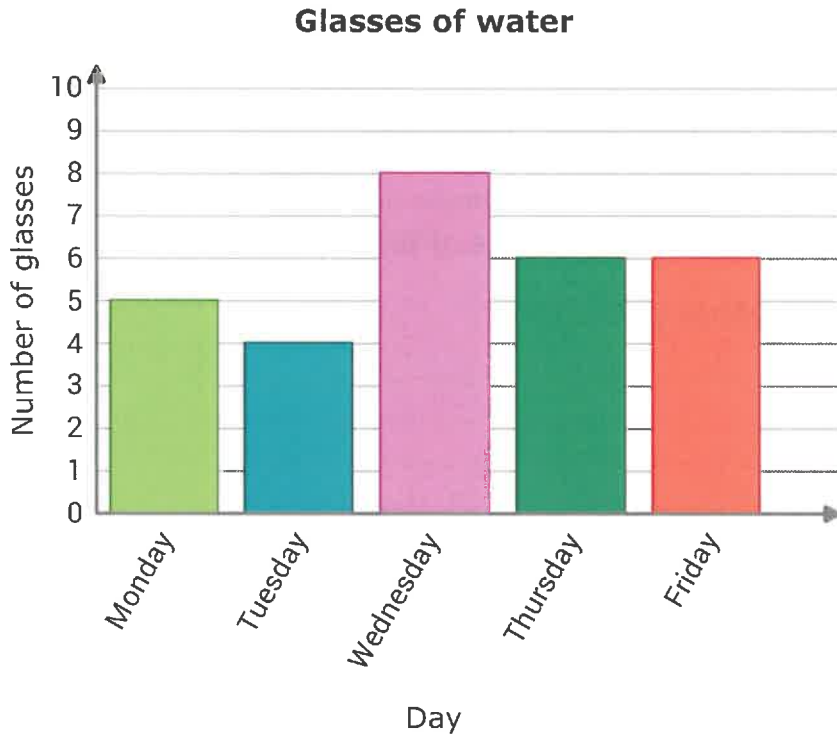
1. Eduardo is interested in weather patterns where he lives. He made a bar graph to show the weather during the first two weeks of the month.



During the next two weeks, there were half as many rainy days and twice as many snowy days. How many days were rainy or snowy during those two weeks?

days

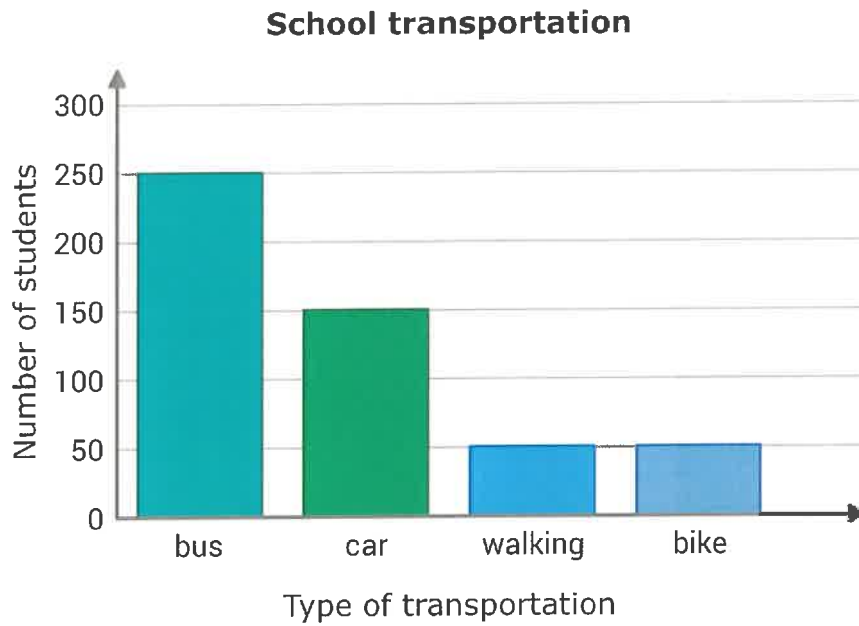
2. Wanda lives in the desert and makes sure to stay hydrated during the summer. She made a bar graph to track how many glasses of water she drank each day for a week in August.



On Saturday, Wanda drank half as many glasses as she did on Wednesday. On Sunday, she drank twice as many glasses as she did on Tuesday. How many glasses of water did Wanda drink on Saturday and Sunday in all?

glasses

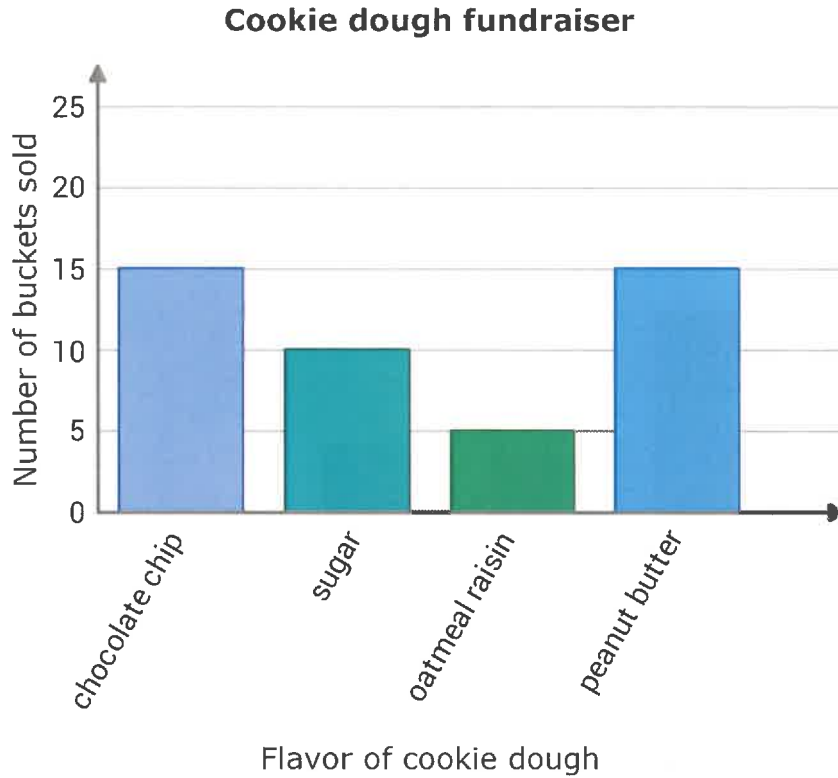
3. Antonio's school sent out a survey to find out how students get to school. The bar graph shows the results.



How many more students take the bus than walk or bike to school?

students

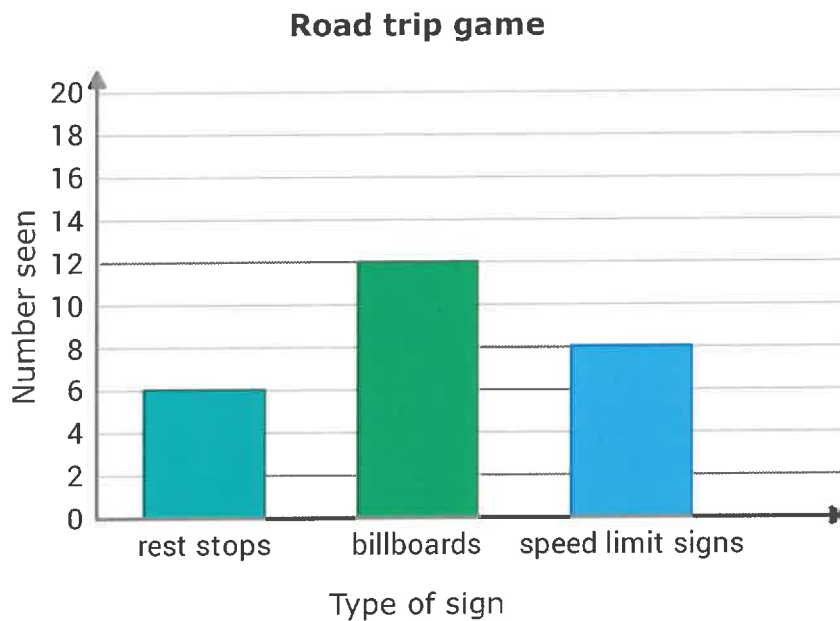
4. Lucia is selling buckets of cookie dough for a school fundraiser. The bar graph shows what she has sold so far.



Lucia set a goal to sell 50 buckets of cookie dough. How many buckets does she still need to sell to reach her goal?

buckets

5. During a long road trip, Sophia and her sisters made a game out of spotting signs along the road. This graph shows the kinds of signs Sophia saw during the first hour.



In the second hour, Sophia saw twice as many signs as she saw in the first hour. How many signs did she see in the second hour?

signs

6. A chemist puts 0.4 liters of liquid in each of 20 beakers. How much liquid is there in total?

liters

7. A hair stylist uses 4.7 bottles of shampoo each week. How many bottles will the stylist use in 20 weeks?

bottles

8. Each cement block weighs 0.5 kilograms. How much do 14 blocks weigh in total?

kilograms

9. A boat traveled at a constant speed for 2 hours, covering a total distance of 31 kilometers. How fast was it going?

*Write your answer as a decimal.*

kilometers per hour

10. Sean bought 4 plastic discs. Each disc weighs 0.8 ounces. How much do the 4 plastic discs weigh in all?

ounces

# Summer Week 3 Grade 6H Day 1

1. Find the number that makes the ratio equivalent to 22:6.

88:

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2. Find the number that makes the ratio equivalent to 5:40.

:8

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3. Find the number that makes the ratio equivalent to 32:16.

8:

---

4. Find the number that makes the ratio equivalent to 7:4.

:48

---

5. Find the number that makes the ratio equivalent to 16:6.

96:

---

6. Solve for  $h$ .

$$h + 901 = 921$$

$$h = \boxed{\phantom{000}}$$

7. Solve for  $n$ .

$$n + 15 = 163$$

$$n = \boxed{\phantom{000}}$$

8. Solve for  $j$ .

$$j + 958 = 994$$

$$j = \boxed{\phantom{000}}$$

9. Solve for  $h$ .

$$h - 404 = 269$$

$$h = \boxed{\phantom{000}}$$

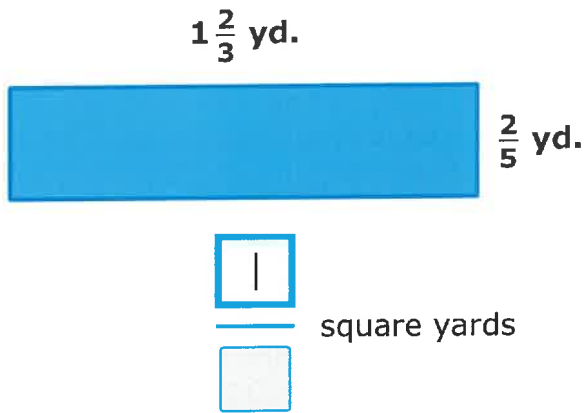
10. Solve for  $g$ .

$$980 = g + 61$$

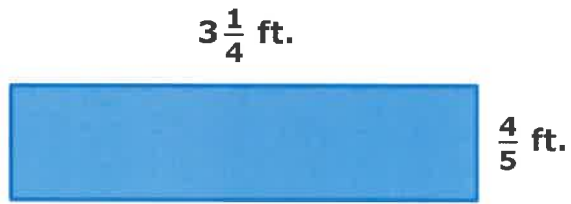
$$g = \boxed{\phantom{000}}$$

# Summer Week 2 Grade 6H Day 5

1. What is the area of the rectangle?



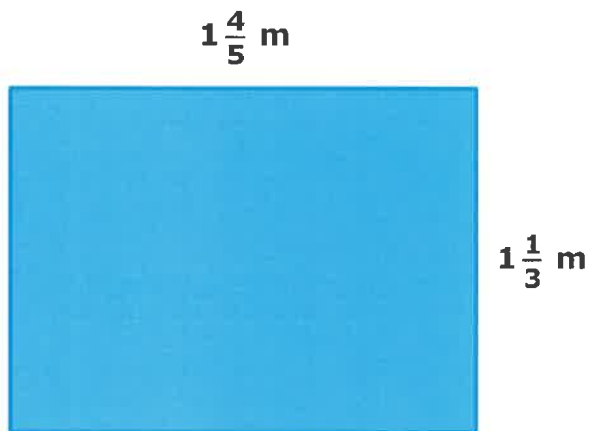
2. What is the area of the rectangle?



\_\_\_\_\_

square feet

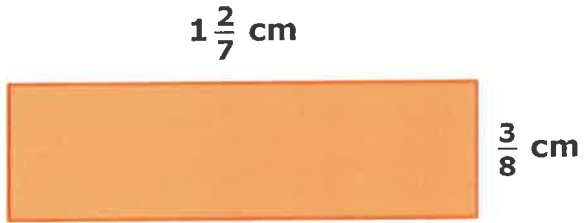
3. What is the area of the rectangle?



\_\_\_\_\_

square meters

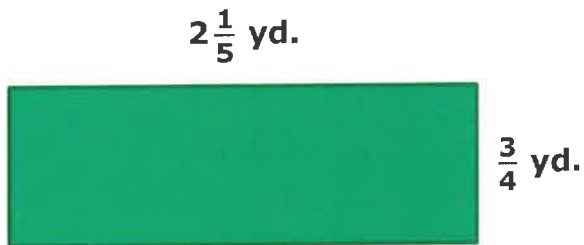
4. What is the area of the rectangle?



— square centimeters

---

5. What is the area of the rectangle?

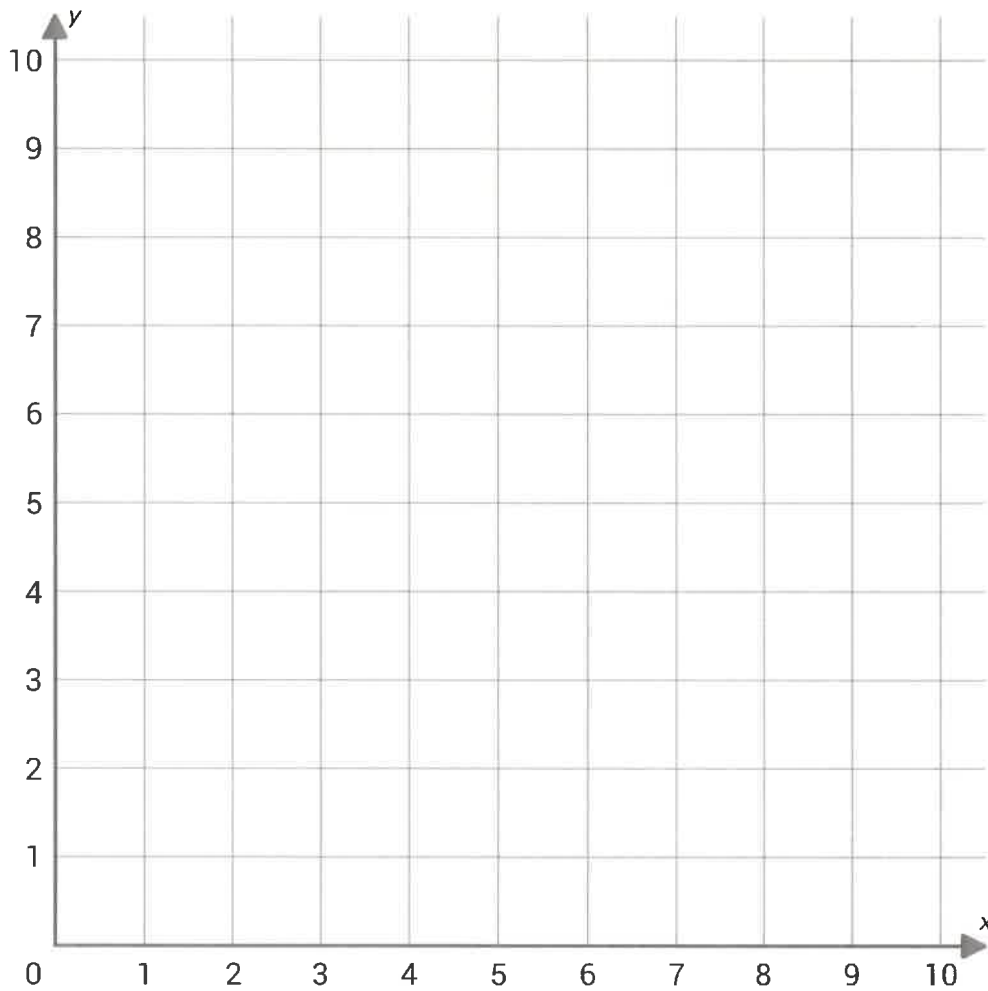


— square yards

---

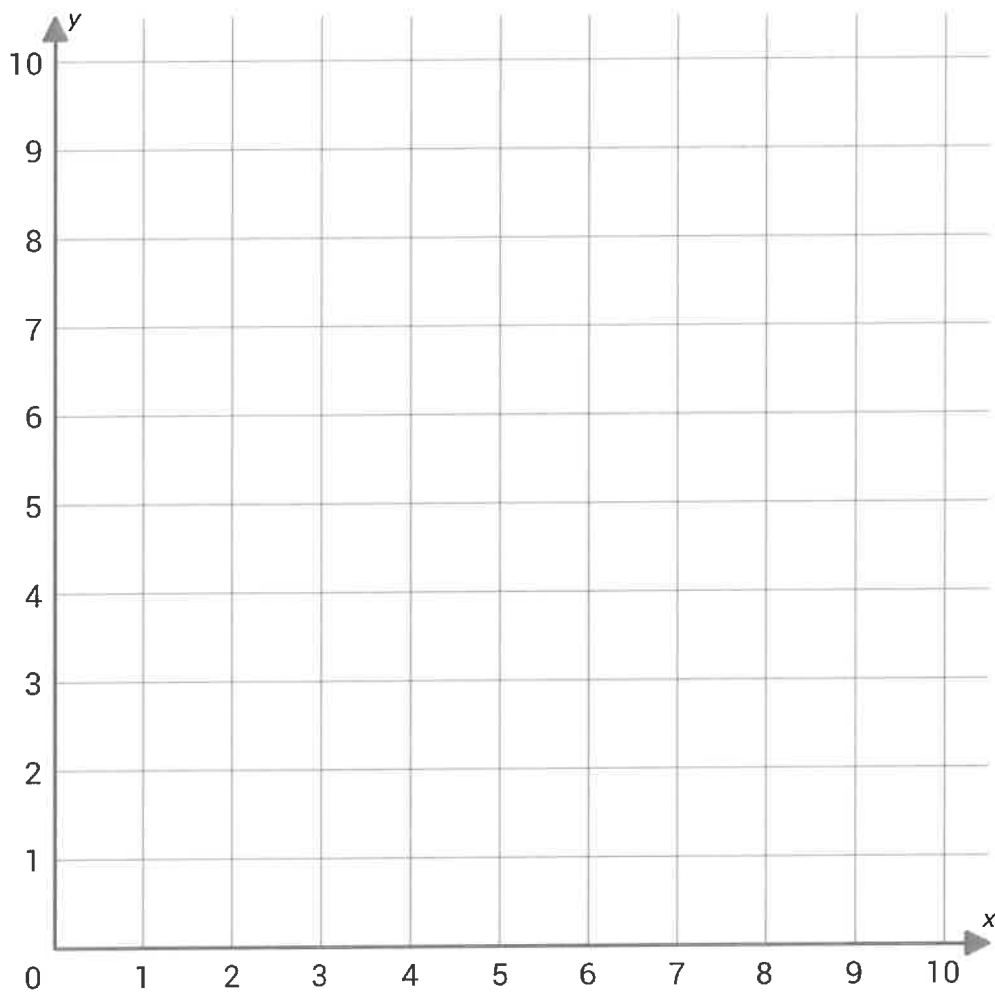
6. Graph the points  $(6, 7)$  and  $(7, 3)$  on the coordinate plane.

*Click to graph a point. Click the point again to delete it.*



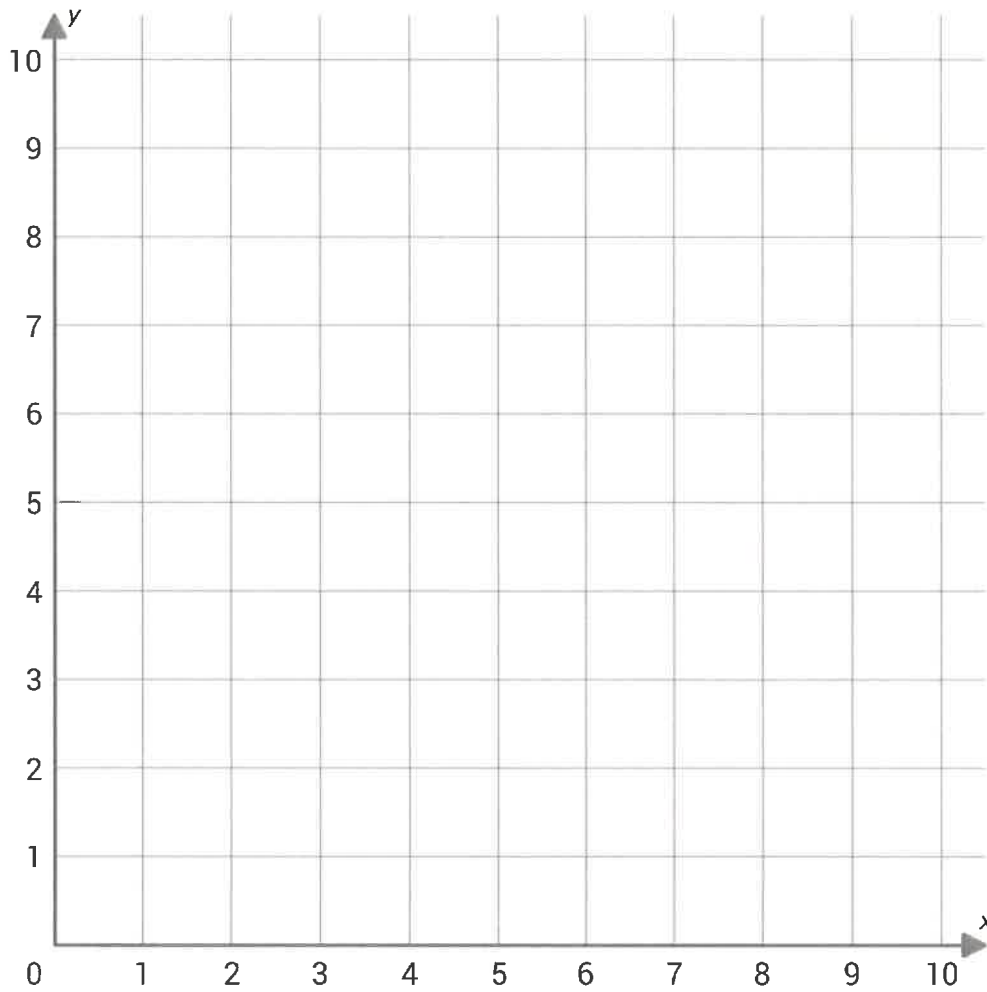
7. Graph the points  $(5, 2)$  and  $(1, 5)$  on the coordinate plane.

*Click to graph a point. Click the point again to delete it.*



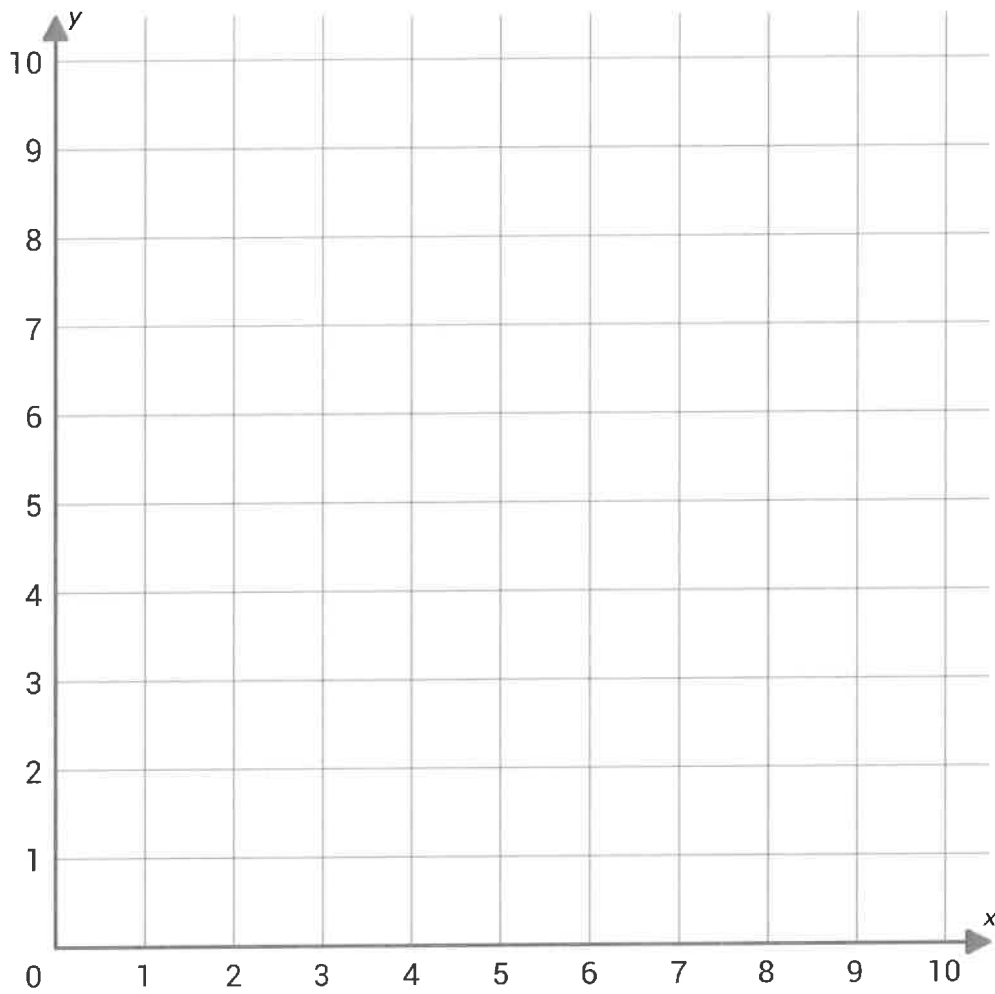
8. Graph the points  $(9, 10)$  and  $(1, 8)$  on the coordinate plane.

*Click to graph a point. Click the point again to delete it.*



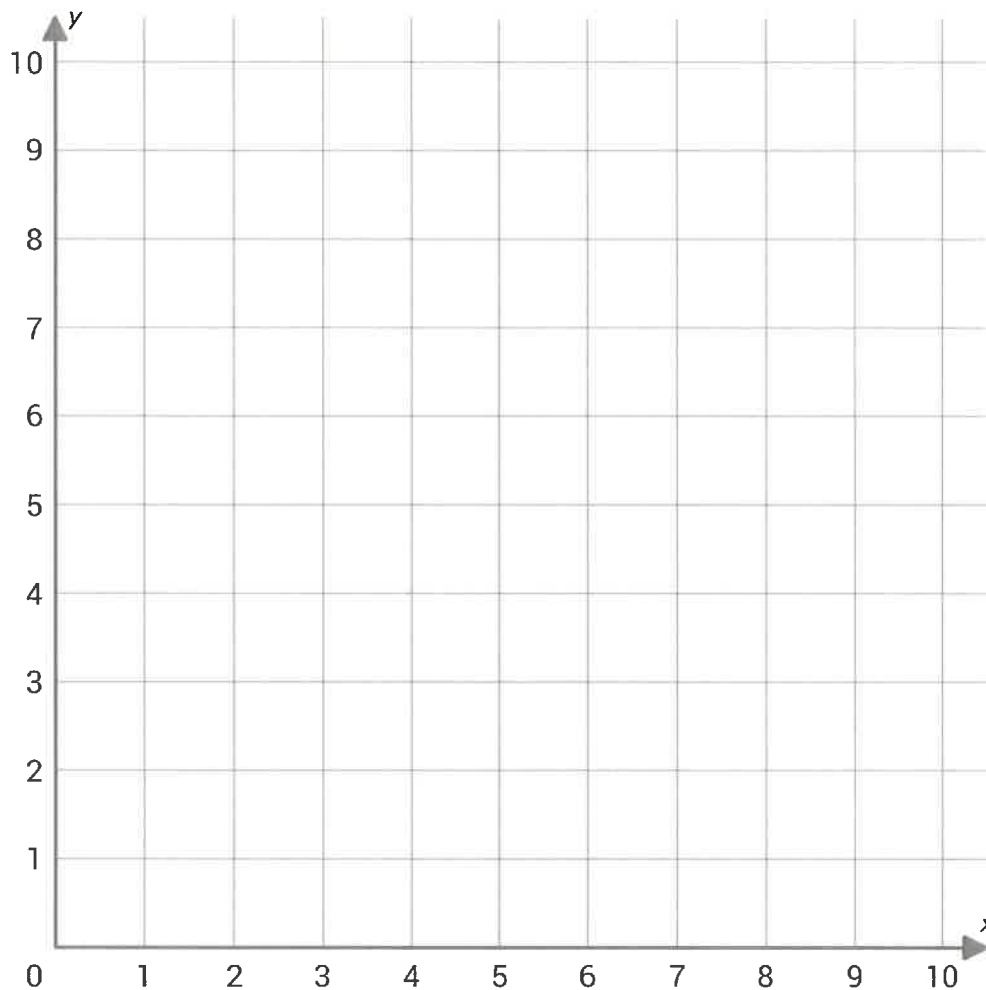
9. Graph the points  $(9, 10)$  and  $(7, 1)$  on the coordinate plane.

*Click to graph a point. Click the point again to delete it.*



10. Graph the points  $(6, 4)$  and  $(8, 1)$  on the coordinate plane.

*Click to graph a point. Click the point again to delete it.*



# Summer Week 3 Grade 6H Day 1

1. Find the number that makes the ratio equivalent to 22:6.

$88: \square$ 

---

2. Find the number that makes the ratio equivalent to 5:40.

$\square:8$ 

---

3. Find the number that makes the ratio equivalent to 32:16.

$8: \square$ 

---

4. Find the number that makes the ratio equivalent to 7:4.

$\square:48$ 

---

5. Find the number that makes the ratio equivalent to 16:6.

$96: \square$ 

---

6. Solve for  $h$ .

$$h + 901 = 921$$

$$h = \boxed{\phantom{000}}$$

7. Solve for  $n$ .

$$n + 15 = 163$$

$$n = \boxed{\phantom{000}}$$

8. Solve for  $j$ .

$$j + 958 = 994$$

$$j = \boxed{\phantom{000}}$$

9. Solve for  $h$ .

$$h - 404 = 269$$

$$h = \boxed{\phantom{000}}$$

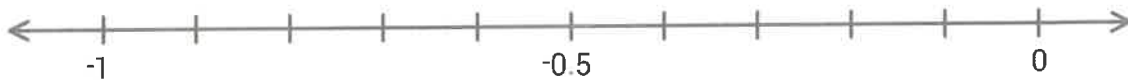
10. Solve for  $g$ .

$$980 = g + 61$$

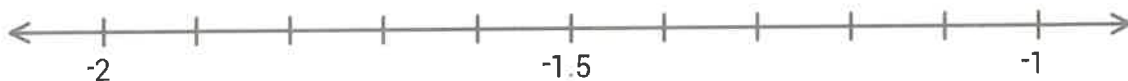
$$g = \boxed{\phantom{000}}$$

# Summer Week 3 Grade 6H Day 2

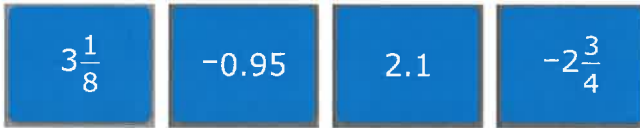
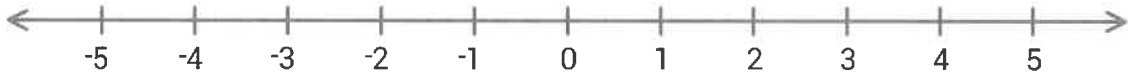
1. Put  $-0.35$ ,  $-\frac{4}{5}$ ,  $-0.65$ , and  $-\frac{1}{2}$  in order from least to greatest. You can use the number line to help.



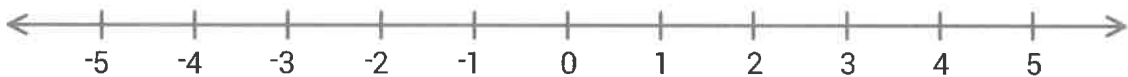
2. Put  $-1.35$ ,  $-1\frac{1}{5}$ ,  $-1\frac{3}{4}$ , and  $-1.55$  in order from least to greatest. You can use the number line to help.



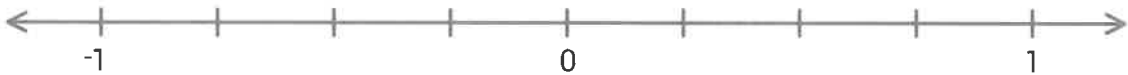
3. Put  $3\frac{1}{8}$ ,  $-0.95$ ,  $2.1$ , and  $-2\frac{3}{4}$  in order from least to greatest. You can use the number line to help.



4. Put  $\frac{9}{4}$ ,  $4$ ,  $-4\frac{2}{5}$ , and  $-2.75$  in order from least to greatest. You can use the number line to help.



5. Put  $\frac{1}{5}$ ,  $\frac{7}{8}$ ,  $-0.9$ , and  $0.45$  in order from least to greatest. You can use the number line to help.



6. Subtract.

$$0.28 - 0.01 = \boxed{\phantom{00}}$$

---

7. Add.

$$0.61 + 0.93 = \boxed{\phantom{00}}$$

---

8. Add.

$$0.7 + 7.6 = \boxed{\phantom{00}}$$

---

9. Subtract.

$$7.6 - 6.5 = \boxed{\phantom{00}}$$

---

10. Subtract.

$$41.5 - 3 = \boxed{\phantom{00}}$$



# Summer Week 3 Grade 6H Day 3

1. Lisa's dog Sparky is on a diet to lose weight. The table shows the change in Sparky's weight each month of his diet.

Month	Change in weight (lbs.)
March	-1
April	-3
May	-2

During which month did Sparky lose the most weight?

2. Peter likes watching movies with horrible reviews. He reads reviews on the *Video Villain* website before choosing which movie to watch next. The table shows the average scores for a few movies.

Movie	Average score
<i>Zebra-Man's Last Stand</i>	-5
<i>Undercover Sidekick 2</i>	-2
<i>Robocat: Unplugged</i>	4

Which movie received the lowest score?

3. On his birthday, Clarence received an ounce of gold from his grandfather. Clarence is curious about its value so he looks it up online. One website shows how the value of gold has changed over several decades.

Years	Change in value
1981–1990	–\$200
1991–2000	–\$80
2001–2010	\$800

During which years did the value of gold change the most?

1981–1990

1991–2000

2001–2010

4. The temperature at which a liquid becomes a solid is called its freezing point. For example, water freezes into ice at 32°F. The freezing points of three other liquids are shown in the table.

Liquid	Freezing point (°F)
Mercury	–38
Linseed oil	–4
Castor oil	14

Which liquid has the lowest freezing point?

mercury

linseed oil

castor oil

5. The roads on Pinefrost Mountain were closed three times last year because of extreme weather. The table shows the low temperatures on those three dates.

Date	Low temperature (°C)
December 27	-12
January 9	-9
January 17	-13

On which date was the low temperature closest to zero?

6. Divide. Give the exact answer, written as a decimal.

$$\begin{array}{r} \boxed{\phantom{000}} \\ 0.8 \overline{) 43} \end{array}$$

7. Divide. Give the exact answer, written as a decimal.

$$515.3 \div 2.5 = \boxed{\phantom{000}}$$

8. Divide. Give the exact answer, written as a decimal.

$$7,275 \div 0.8 = \boxed{\phantom{000}}$$

9. Divide. Give the exact answer, written as a decimal.

$$8,870.11 \div 6.25 = \boxed{\phantom{000000}}$$

10. Divide. Give the exact answer, written as a decimal.

$$\begin{array}{r} \boxed{\phantom{00000}} \\ 0.56 \overline{) 77} \end{array}$$

# Summer Week 3 Grade 6H Day 4

1. Mr. Oberly is an electrician and has his own business, Zippity Wires. A customer recently paid him to install a new home security system. After spending \$128.95 on supplies, Mr. Oberly ended up with a profit of \$321.05.

Let  $p$  represent how much the customer paid Mr. Oberly. Which equation models the problem?

$$p - 128.95 = 321.05$$

$$p + 128.95 = 321.05$$

Solve this equation to find how much the customer paid Mr. Oberly.

\$

2. Victoria made 265 scented candles to sell at a craft show. Some of the candles smelled like strawberry mint. The remaining 90 candles smelled like key lime pie.

Let  $s$  represent how many candles smelled like strawberry mint. Which equation models the problem?

$$s + 90 = 265$$

$$s - 90 = 265$$

Solve this equation to find how many candles smelled like strawberry mint.

candles

3. To practice using his protractor, Finn has drawn two adjacent angles that form a  $124^\circ$  angle. The measure of the first angle is  $86^\circ$ .

Let  $s$  represent the measure of the second angle. Which equation models the problem?

$s - 86 = 124$

$86 + s = 124$

Solve this equation to find the measure of the second angle.

  $^\circ$ 

4. The new bunk beds in Jen's room are 72 inches tall. The bunk beds are 54 inches shorter than the ceiling in Jen's room.

Let  $c$  represent the height of Jen's ceiling. Which equation models the problem?

$c - 54 = 72$

$c + 54 = 72$

Solve this equation to find the height of Jen's ceiling.

 inches

5. Christina has been busy planning a barbecue for her older brother's high school graduation. She invited 13 relatives from her mother's side of the family. The rest of the relatives she invited are from her father's side of the family. She invited a total of 58 relatives.

Let  $f$  represent the number of relatives Christina invited from her father's side. Which equation models the problem?

$$f - 13 = 58$$

$$f + 13 = 58$$

Solve this equation to find the number of relatives Christina invited from her father's side.

relatives

---

6. What is 90% of 10?

7. What is 80% of 15?

8. What is 50% of \$4?

\$

---

9. What is 30% of \$20?

\$

10. Fill in the missing number.

60% of 75 =

# Summer Week 3 Grade 6H Day 5

1. Write the expression using an exponent.

$$100 \cdot 100 \cdot 100 \cdot 100 \cdot 100$$

2. Write the expression using an exponent.

$$4 \cdot 4$$

3. Write the expression using an exponent.

$$10 \cdot 10 \cdot 10 \cdot 10$$

4. Write the expression using an exponent.

$$5 \cdot 5 \cdot 5 \cdot 5 \cdot 5 \cdot 5 \cdot 5 \cdot 5 \cdot 5$$

5. Write the expression using an exponent.

$$10 \cdot 10 \cdot 10$$

6. In math class, Abby learned that the ratio between the surface area of a cube and the area of one side is 6 to 1. When Abby got a cube-shaped box in the mail, she decided to test this fact. The area of one side of the box was 20 square inches.

What was the surface area of the entire box?

square inches

7. Angie sells handmade bracelets at craft fairs. She bought 2 packs of charms. One pack has 150 small charms and 60 large charms. The other pack has the same ratio of small to large charms. The second pack has 50 small charms.

How many large charms are in the second pack?

large charms

8. Last month, Sunny Steps shoe store ordered 80 pairs of sneakers and 200 pairs of sandals. This month, they plan to order the same ratio of sneakers to sandals, and they only plan to order 20 pairs of sneakers.

How many pairs of sandals will Sunny Steps shoe store order?

pairs of sandals

---

9. Javier teaches yoga classes at his community center. In a 60-minute class last night, he taught 30 poses. Today, he has a 30-minute class.

If he teaches at the same rate, how many poses will Javier teach in today's class?

poses

---

10. Shawna does her math homework every night. Last night, Shawna spent 45 minutes solving 15 math problems. Tonight, she needs to solve 10 math problems.

If she does them at the same rate, how many minutes will Shawna spend solving tonight's math problems?

minutes



# Summer Week 4 Grade 6H Day 1

1. Divide.

$$9 \frac{9}{10} \div 9 \frac{9}{10} = \boxed{\phantom{000}}$$

---

2. Divide.

$$4 \frac{1}{9} \div \frac{1}{2} = \boxed{\phantom{000}}$$

---

3. Divide.

$$2 \frac{1}{7} \div \frac{5}{6} = \boxed{\phantom{000}}$$

---

4. Divide.

$$10 \div 7 \frac{1}{2} = \boxed{\phantom{000}}$$

---

5. Divide.

$$7\frac{1}{3} \div 4 = \boxed{\phantom{000}}$$

6. This equation shows how Braden's earnings are related to the amount of time he spends working at the drugstore.

$$m = 10h$$

The variable  $h$  represents the amount of time he spends working at the drugstore, and the variable  $m$  represents the amount of money earned. After spending 4 hours working at the drugstore, how much money will Braden earn?

\$

7. This equation shows how one maple tree's height has changed with its age.

$$h = 11a$$

The variable  $a$  represents the age of the tree in years, and the variable  $h$  represents the height of the tree in inches. How tall was the maple tree when it was 6 years old?

inches

8. This equation shows how the number of flowers Gary can have in his garden is related to the number of seed packets he purchases.

$$f = s + 97$$

The variable  $s$  represents the number of seed packets he purchases, and the variable  $f$  represents the total number of flowers in the garden. With 2 seed packets, how many total flowers can Gary have in his garden?

flowers

---

9. This equation shows how the total number of appetizer recipes Britney knows depends on the number of weeks she attends culinary school.

$$a = w + 23$$

The variable  $w$  represents the number of weeks she has attended culinary school, and the variable  $a$  represents the total number of appetizer recipes she knows. After 67 weeks of culinary school, how many total appetizer recipes will Britney know?

appetizer recipes

---

10. This equation shows how the cost of Fred's birthday party depends on the number of guests.

$$c = g + 61$$

The variable  $g$  represents the number of guests, and the variable  $c$  represents the cost in dollars. If there are 6 guests, how much will Fred's birthday party cost?

\$



# Summer Week 4 Grade 6H Day 2

1. Evaluate the expression.

$$\frac{1}{5} + \frac{1}{8} \div \left( \frac{3}{4} - \frac{1}{2} \right)$$

*Write your answer as a fraction or as a whole or mixed number.*

2. Evaluate the expression.

$$\left( \frac{3}{5} + \frac{1}{2} - \frac{9}{10} \right)^2$$

*Write your answer as a fraction or as a whole or mixed number.*

3. Evaluate the expression.

$$\left(\frac{4}{5} - \frac{1}{5}\right) \times \left(\frac{1}{4}\right)^2$$

*Write your answer as a fraction or as a whole or mixed number.*

4. Evaluate the expression.

$$\frac{3}{10} \div \frac{1}{3} \times \left(\frac{1}{2} + \frac{1}{5}\right)$$

*Write your answer as a fraction or as a whole or mixed number.*

5. Evaluate the expression.

$$\frac{1}{2} - \left(\frac{1}{3} + \frac{2}{3}\right) \times \frac{2}{5}$$

*Write your answer as a fraction or as a whole or mixed number.*

6. Solve for  $v$ .

$$\frac{v}{24} = 29$$

$$v = \boxed{\phantom{000}}$$

---

7. Solve for  $g$ .

$$\frac{g}{18} = 24$$

$$g = \boxed{\phantom{000}}$$

---

8. Solve for  $t$ .

$$\frac{t}{16} = 30$$

$$t = \boxed{\phantom{000}}$$

---

9. Solve for  $k$ .

$$\frac{k}{10} = 21$$

$$k = \boxed{\phantom{000}}$$

---

10. Solve for s.

$$\frac{s}{16} = 15$$

s =

# Summer Week 4 Grade 6H Day 3

1. It's strawberry season, so Monica wants to make strawberry jam. She buys all of the strawberries left at her local town market for a total of \$25.50. If the strawberries cost \$4.25 per quart, how many quarts does she buy?

quarts

---

2. Johnson's Sporting Goods Store sells children's trampolines for \$98.50 each. This weekend they made \$689.50 on trampolines. How many trampolines did they sell this weekend?

trampolines

---

3. Lila and her friends went on vacation to Slippery Slide Water Park. Before they left, Lila filled her gas tank with 14.8 gallons of gas. She paid \$38.48 for the gas. How much did the gas cost per gallon?

\$

---

4. A few times a week, Scott treats himself to a small latte from his favorite coffee shop. Each latte costs \$3.55. If Scott bought 15 lattes last month, how much did he spend?

\$

---

5. Kathleen wants to plant a small vegetable garden in her yard. She fences off a rectangular area with a length of 25.75 feet and a width of 10.2 feet. What is the area of Kathleen's vegetable garden?

square feet

6. Divide.

$$8\frac{1}{2} \div 1\frac{1}{4} = \text{$$

7. Divide.

$$7\frac{2}{5} \div 9\frac{1}{4} = \text{$$

8. Divide.

$$\frac{5}{6} \div 3\frac{3}{4} = \text{$$

9. Divide.

$$\frac{9}{10} \div 3\frac{3}{5} = \text{$$

10. Divide.

$$10 \div 1\frac{3}{4} = \boxed{\phantom{000}}$$



# Summer Week 4 Grade 6H Day 4

1. Hannah is setting up an egg balancing game for Field Day. Players on each team must get all of the eggs from one end of their station to the other by balancing the eggs on their heads! For the game, Hannah sets up a bowl of 8 eggs at each team's station. In all, she needs 40 eggs.

Let  $t$  represent the number of teams competing in the game. Which equation models the problem?

$$8t = 40$$

$$\frac{t}{8} = 40$$

Solve this equation to find how many teams are competing.

teams

---

2. Eliana is staking off a rectangular area of her yard for a new vegetable garden. The width of the garden will be 7 feet, and the area of the garden will be 56 square feet.

Let  $\ell$  represent the length of the garden. Which equation models the problem?

$$7\ell = 56$$

$$\frac{\ell}{7} = 56$$

Solve this equation to find the length of the garden.

feet

---

3. Mr. Thurgood gave his students a math quiz last Friday. Each question on the quiz was worth 3 points, and the quiz was worth 45 points in all.

Let  $q$  represent the number of questions on the quiz. Which equation models the problem?

$$3q = 45$$

$$\frac{q}{3} = 45$$

Solve this equation to find the number of questions on the quiz.

questions

4. The perimeter of an equilateral triangle is 72 centimeters.

Let  $\ell$  represent the length of each side of the triangle. Which equation models the problem?

$$\frac{\ell}{3} = 72$$

$$3\ell = 72$$

Solve this equation to find the length of each side of the triangle.

centimeters

5. Gabby just bought a 6-month subscription to Color Crates, an art delivery service that sends a new art project every month. Gabby figured out the subscription comes to \$12.25 each month.

Let  $s$  represent the total cost of the subscription. Which equation models the problem?

$$\frac{s}{6} = 12.25$$

$$6s = 12.25$$

Solve this equation to find the total cost of the subscription.

\$

---

6. Factor  $81y - 45$ .

*Write your answer as a product with a whole number greater than 1.*

---

7. Factor  $6a + 54b$ .

*Write your answer as a product with a whole number greater than 1.*

---

8. Factor  $21a - 35$ .

*Write your answer as a product with a whole number greater than 1.*

9. Factor  $24y + 42z$ .

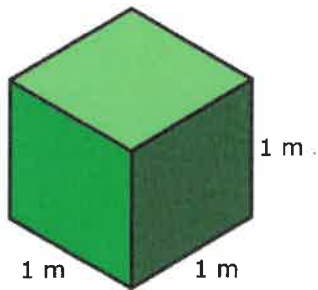
*Write your answer as a product with a whole number greater than 1.*

10. Factor  $2b - 16$ .

*Write your answer as a product with a whole number greater than 1.*

# Summer Week 4 Grade 6H Day 5

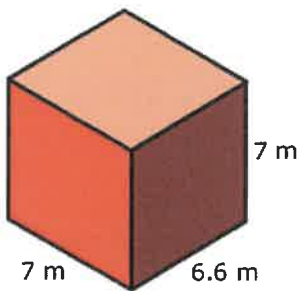
1. What is the volume?



cubic meters

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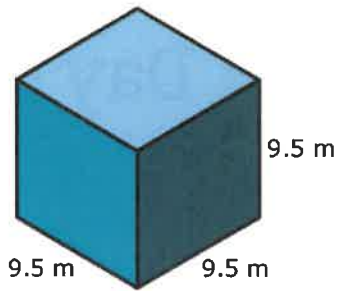
2. What is the volume?



cubic meters

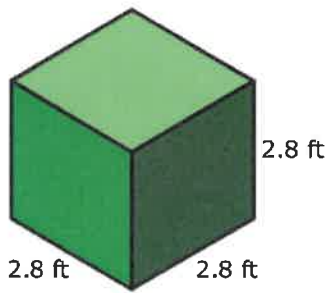
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3. What is the volume?



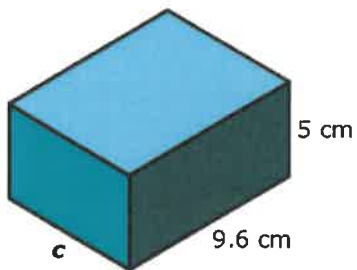
cubic meters

4. What is the volume?



cubic feet

5. The volume of this rectangular prism is 350.40 cubic centimeters. What is the value of  $c$ ?



$c =$   centimeters

6. In the first week of her school's fundraiser, Julie sold 6 items. By the end of the fundraiser, Julie had earned a beach ball as a prize for selling more than 20 items.

Let  $x$  represent how many more items Julie sold after the first week of the fundraiser. Which inequality describes the problem?

$6 + x \geq 20$

$6 + x > 20$

Solve the inequality. Then, complete the sentence to describe the solution.

Julie sold more than  items after the first week of the fundraiser.

---

7. After visiting a berry farm, Rafi used 1.5 pounds of the strawberries he picked to make jam. He still had more than 3 pounds of strawberries left.

Let  $x$  represent how many pounds of strawberries Rafi picked. Which inequality describes the problem?

$x - 1.5 > 3$

$x - 1.5 \geq 3$

Solve the inequality. Then, complete the sentence to describe the solution.

Rafi picked more than  pounds of strawberries.

---

8. Richard is making a budget for his 5-day trip to Virginia Beach. First, he sets an amount of money he thinks he'll need for each day of the trip. In all, Richard figures he'll need more than \$800 for the whole trip.

Let  $x$  represent how much money Richard budgets for each day. Which inequality describes the problem?

$5x \geq 800$

$5x > 800$

Solve the inequality. Then, complete the sentence to describe the solution.

Richard budgets more than \$  for each day.

9. While at a craft fair, Colleen found a stand selling bars of handmade soap for \$3 each. She liked so many of the different scents that she went over her \$18 budget.

Let  $x$  represent how many bars of soap Colleen bought. Which inequality describes the problem?

$3x > 18$

$3x \geq 18$

Solve the inequality. Then, complete the sentence to describe the solution.

Colleen bought more than  bars of soap.

10. Winston went shopping for a helmet and goggles for skiing. After spending \$90.50 on a helmet, he bought a pair of goggles that put him over his \$150 budget.

Let  $x$  represent the cost of the goggles. Which inequality describes the problem?

$$90.50 + x < 150$$

$$90.50 + x > 150$$

Solve the inequality. Then, complete the sentence to describe the solution.

The goggles cost more than \$  .

