Name: _____

Summer Week 1 Grade 7 Day 1

1. Find the number that makes the ratio equivalent to 7:5.

   35:☐

2. Find the number that makes the ratio equivalent to 55:88.

   ☐:8

3. Find the number that makes the ratio equivalent to 1:8.

   11:☐

4. Find the number that makes the ratio equivalent to 84:30.

   ☐:5

5. Find the number that makes the ratio equivalent to 4:11.

   36:☐

 Name: _____

Summer Week 1 Grade 7 Day 2

1. Solve for c.

$c - 190 = 374$

$c =$ ☐

2. Solve for c.

$832 = c + 183$

$c =$ ☐

3. Solve for c.

$c - 2 = 329$

$c =$ ☐

4. Solve for q.

$q - 350 = 485$

$q =$ ☐

5. Solve for h.

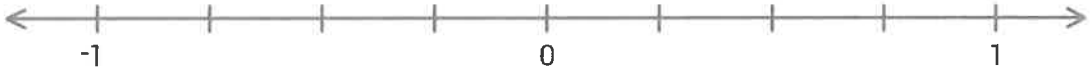
$h + 26 = 626$

$h =$ ☐

Name: _____

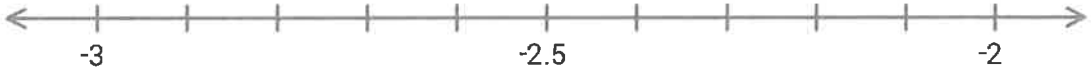
Summer Week 1 Grade 7 Day 3

1. Put 0.7, 1, 0, and −0.45 in order from least to greatest. You can use the number line to help.



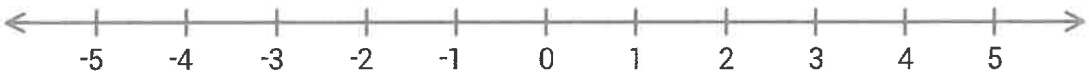
0.7 | 1 | 0 | −0.45

2. Put $-2\frac{3}{10}$, $-\frac{14}{5}$, −2.1, and −2.6 in order from least to greatest. You can use the number line to help.



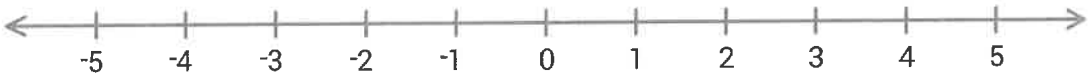
$-2\frac{3}{10}$ | $-\frac{14}{5}$ | −2.1 | −2.6

3. Put 4.75, $-\frac{5}{8}$, −4.55, and $-2\frac{1}{5}$ in order from least to greatest. You can use the number line to help.



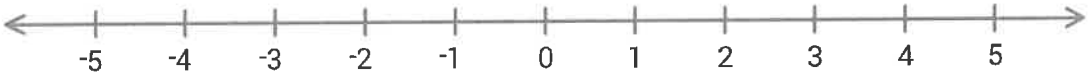
4.75 | $-\frac{5}{8}$ | −4.55 | $-2\frac{1}{5}$

4. Put $\frac{3}{2}$, -1.55, 0, and $-3\frac{5}{8}$ in order from least to greatest. You can use the number line to help.



$\frac{3}{2}$ | -1.55 | 0 | $-3\frac{5}{8}$

5. Put -2.95, $-4\frac{3}{10}$, $4\frac{5}{8}$, and $-\frac{5}{4}$ in order from least to greatest. You can use the number line to help.



-2.95 | $-4\frac{3}{10}$ | $4\frac{5}{8}$ | $-\frac{5}{4}$

Name: _____

Summer Week 1 Grade 7 Day 4

1. Subtract.

   $7.88 - 4.84 =$ ☐

2. Add.

   $1 + 95.64 =$ ☐

3. Subtract.

   $20.37 - 9.7 =$ ☐

4. Add.

   $9 + 2.7 =$ ☐

5. Add.

   $5.9 + 7.2 =$ ☐

Name: _____

Summer Week 1 Grade 7 Day 5

1. Kathleen and her family are going camping. Their map shows the elevations of three sites where Kathleen and her family can set up camp.

Campsite	Elevation (ft)
Sunrise Meadow	45
Cedar Valley	−60
Granite Falls	50

Which campsite's elevation is farthest from sea level?

Sunrise Meadow | Cedar Valley | Granite Falls

2. On his birthday, Felix received an ounce of gold from his grandfather. Felix 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

3. Austen's cat Blimpy has gained weight in recent years. So, Austen decides to put Blimpy on a diet. The change in Blimpy's weight each month is shown in the table.

Month	Change in weight (oz.)
September	−4
October	−7
November	−5

During which month did Blimpy lose the most weight?

September | October | November

4. Carlton Caverns is a popular tourist destination because of its deep, winding caves. Andy and his family like to visit Carlton Caverns, but they always argue over which cave to explore first. The elevation changes of the three most popular caves are shown on a map.

Cave	Elevation change (m)
Spooky Cave	−325
Hollow Caverns	−360
Skylight Cove	−295

Which cave has the greatest elevation change?

Spooky Cave | Hollow Caverns | Skylight Cove

5. Trudy is showing her friends a new card game in which you can gain or lose points. Whoever has the score furthest from zero wins. So, losing points can actually help you win! The scores at the end of the game are shown in the table.

Player	Score
Trudy	60
Whitney	45
Matt	−70

Who won the game?

Trudy | Whitney | Matt

 Name: _____

Summer Week 2 Grade 7 Day 6

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

$$0.4 \overline{)\ 593.0}$$

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

$$0.5 \overline{)\ 568.6}$$

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

$$2.5 \overline{)\ 9{,}823}$$

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

$$0.8 \overline{)\ 210}$$

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

$$0.04 \overline{)\ 47.99}$$

 Name: _____

Summer Week 2 Grade 7 Day 7

1. Latrell won the Math Student of the Month award at his school. As a reward, he was given a ticket to the trampoline park for a certain time slot. When Latrell went to the park, he played dodgeball on the trampoline court for 90 minutes. Then, he had 30 minutes left to spend in the free jump area.

   Let t represent the number of minutes on Latrell's ticket. Which equation models the problem?

$t + 90 = 30$	$t - 90 = 30$

   Solve this equation to find the number of minutes on Latrell's ticket.

   ☐ minutes

2. Emmy just bought a new laptop! She used a student discount code that took $50.75 off the original price. The discounted price of the laptop was $349.24.

   Let p represent the original price of the laptop. Which equation models the problem?

$p - 50.75 = 349.24$	$p + 50.75 = 349.24$

   Solve this equation to find the original price of the laptop.

   $☐

3. Javier really wanted a new video game console. His parents made a deal that they would buy it for him, and then he could pay them back over time. So far, Javier has already paid his parents $128.75. He still owes them $132.45.

Let v represent how much the video game console cost. Which equation models the problem?

$v + 128.75 = 132.45$ | $v - 128.75 = 132.45$

Solve this equation to find how much the video game console cost.

$ ____

4. Tara's softball coach split the team into two groups to practice different skills. One group of 22 players is practicing batting. The other group is practicing catching. There are 31 players on the team.

Let c represent the number of players that are practicing catching. Which equation models the problem?

$c - 22 = 31$ | $22 + c = 31$

Solve this equation to find the number of players that are practicing catching.

____ players

5. Camille and Dakota are best friends, and they both have lead parts in the fall play. They decide to count their lines on the first read through the script and compare. Camille has 56 more lines than Dakota. Camille has 168 lines in the play.

Let d represent how many lines Dakota has. Which equation models the problem?

$d - 56 = 168$ | $d + 56 = 168$

Solve this equation to find how many lines Dakota has.

_____ lines

 Name: _____

Summer Week 2 Grade 7 Day 8

1. What is 35% of 100?

2. Fill in the missing number.

   20% of 55 = ☐

3. What is 95% of 80?

4. Fill in the missing number.

   40% of 60 = ☐

5. What is 90% of $10?

   $☐

Name: _____

Summer Week 2 Grade 7 Day 9

1. Write the expression using an exponent.

$6 \cdot 6 \cdot 6$

2. Write the expression using an exponent.

$4 \cdot 4 \cdot 4 \cdot 4 \cdot 4$

3. Write the expression using an exponent.

$10 \cdot 10$

4. Write the expression using an exponent.

$55 \cdot 55 \cdot 55 \cdot 55 \cdot 55 \cdot 55$

5. Write the expression using an exponent.

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

Name: _____

Summer Week 2 Grade 7 Day 10

1. Marcy loves to do puzzles. Last week, she spent 2 hours putting together a puzzle with 300 pieces. This week, she wants to put together a puzzle with 450 pieces.

   If she keeps the same pace, how many hours should it take Marcy to put the puzzle together this week?

   ☐ hours

2. 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

3. For field trips, Stewart Middle School has parents chaperone groups of students. They always keep the same ratio of parents to students. There were 15 parents and 75 students on the aquarium field trip. Only 25 students are going on the museum field trip.

   How many parents will go on the museum field trip?

   ☐ parents

4. The sixth-grade talent show is next week. Each year, every performance is allotted the same amount of time. Last year, there were 10 performances, and the show lasted 60 minutes. This year, there are 15 performances.

How long will this year's talent show last?

_____ minutes

5. The pull of gravity is different on Earth than on the Moon. An object that weighs 25 pounds on Earth weighs about 4 pounds on the Moon. An astronaut, wearing all the necessary gear, weighs 500 pounds on Earth.

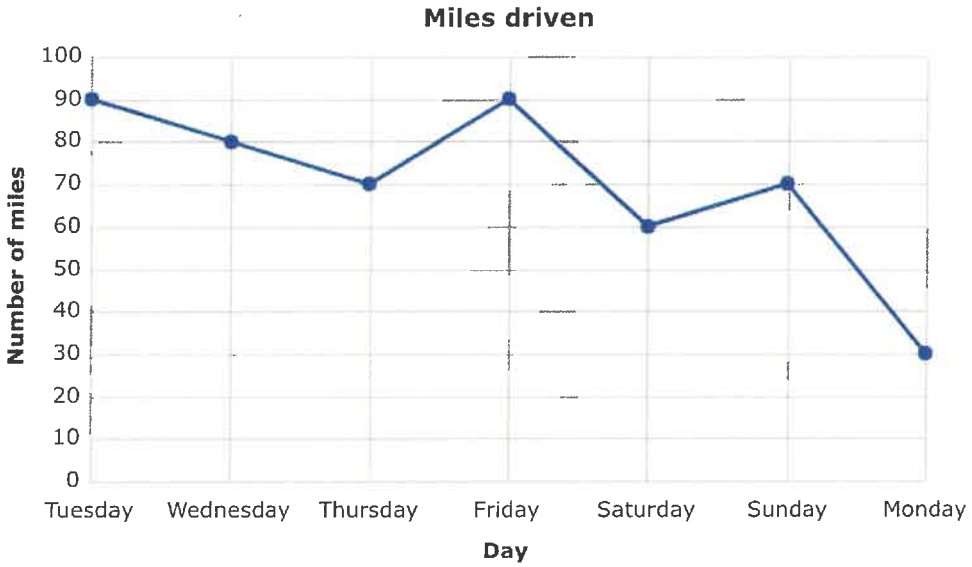
How many pounds would the astronaut with gear weigh on the Moon?

_____ pounds

 Name: _____

Summer Week 3 Grade 7 Day 11

1. Cody kept a driving log to see how many miles he drove each day.



What is the mean of the numbers?

2. The county released data about how many schools there are in each town.

Schools in each town	
Town	**Number of schools**
Riverside	𝍸
Ashland	𝍸 | | |
Greenwood	𝍸 | | | |
Chesterton	𝍸 | | | |
Watertown	𝍸 | | |
Marion	| | |
Springfield	𝍸 | | |

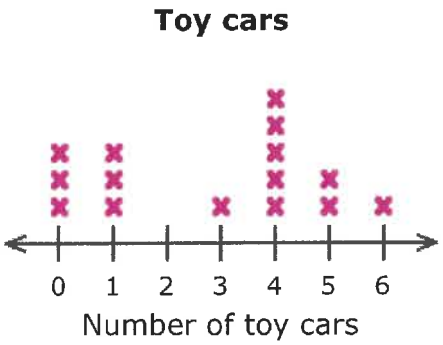
What is the mode of the numbers?

3. Several people compared how many Web pages they had visited.

Web pages visited	
Person	**Number of Web pages**
Ted	𝍸 𝍸 ||||
Ron	||||
Steve	𝍸 𝍸 |||
Jack	||
Mabel	𝍸 |

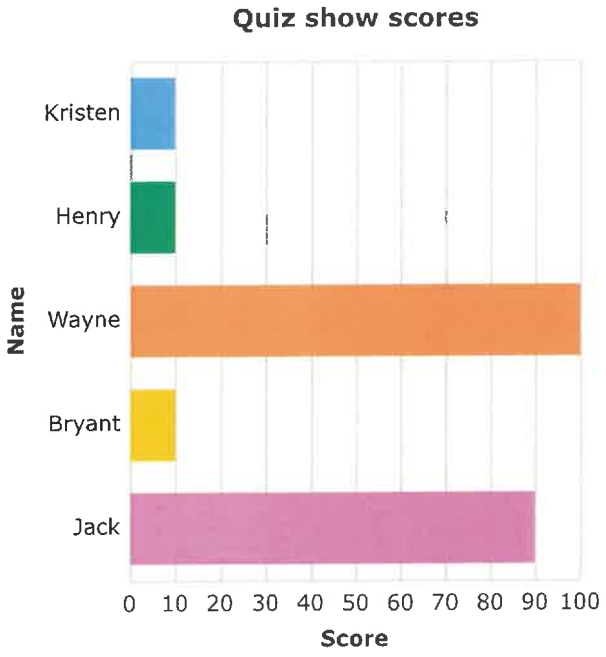
What is the median of the numbers?

4. Some students shared how many toy cars they have.



What is the median of the numbers?

5. The players on a quiz show received the following scores.



What is the median of the numbers?

 Name: _____

Summer Week 3 Grade 7 Day 12

1. This equation shows how the total number of pieces Cooper knows how to sing depends on the number of weeks he takes voice lessons.

   $p = w$

   The variable w represents the number of weeks he has taken voice lessons, and the variable p represents the total number of pieces he has learned. After 94 weeks of voice lessons, how many pieces will Cooper be able to sing, in total?

   ☐ pieces

2. This equation shows how Dusty the puppy's weight varies with age.

   $p = 3a$

   The variable a represents Dusty's age in months, and the variable p represents Dusty's weight in pounds. How heavy was Dusty at 8 months old?

   ☐ pounds

3. This equation shows how the total distance Austin has walked depends on the number of trips he has made to school.

$d = t + 52$

The variable t represents the number of trips he has made, and the variable d represents the total distance walked in kilometers. After 27 trips to school, how many kilometers will Austin have walked in total?

☐ kilometers

4. This equation shows how the total cost of a members-only speaker series is related to the number of events attended.

$c = a + 57$

The variable a represents the number of events attended, and the variable c represents the total cost. What is the total cost for someone to attend 40 events?

$☐

5. This equation shows how the total number of books Chloe has read depends on the number of months she has been part of a book club.

$b = 8m$

The variable m represents the number of months she has been a member of the book club, and the variable b represents the number of books that she has read. After belonging to the book club for 4 months, how many books will Chloe have read in all?

☐ books

Name: _____

Summer Week 3 Grade 7 Day 13

1. Evaluate the expression.

$$\left(\frac{1}{2} \times \frac{1}{4} \div \frac{1}{3}\right)^2$$

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

2. Evaluate the expression.

$$\frac{9}{10} - \frac{1}{2} \times \left(\frac{1}{5} + \frac{3}{4}\right)$$

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

3. Evaluate the expression.

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

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

4. Evaluate the expression.

$$1 - \left(\frac{5}{6} - \frac{1}{3}\right)^2$$

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

5. Evaluate the expression.

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

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

Name: _____

Summer Week 3 Grade 7 Day 14

1. Solve for c.

$9c = 828$

$c =$ ☐

2. Solve for g.

$\frac{g}{13} = 14$

$g =$ ☐

3. Solve for s.

$13s = 858$

$s =$ ☐

4. Solve for t.

$23t = 598$

$t =$ ☐

5. Solve for z.

$18z = 234$

$z =$ ☐

Name: _____

Summer Week 3 Grade 7 Day 15

1. When Deion was born, his grandfather gave him a 7.5-gram gold coin as a present. Today, Deion read in the newspaper that a gram of gold is worth $50.04. How much money is the gold coin worth?

   $ ____

2. Candice is taking a road trip to the beach with her friends. She fills her car up with 11.2 gallons of gas. If the gas costs $2.95 per gallon, how much money does Candice spend?

   $ ____

3. Haley bought a new truck for her landscaping business. She loves that it has space for all her equipment, but she wishes it got better gas mileage. She only gets 18.4 miles per gallon on the highway. If her gas tank holds 20.5 gallons, how far can she drive with a full tank?

   ____ miles

4. Marathon Digital Movies is having a sale. Customers can download 13 movies for $15.99. How much does each movie cost with the sale?

   $ ____

5. Growing up, Mrs. Reeder's favorite book was *The Adventures of Tom Sawyer*. Now that she is a teacher, she buys 25 copies to read with her class. If each book costs $7.19, how much does Mrs. Reeder spend?

$

Name: _____

Summer Week 4 Grade 7 Day 16

1. Divide.

$3\frac{5}{9} \div 10\frac{2}{3} =$ ☐

2. Divide.

$5\frac{5}{6} \div 2\frac{1}{2} =$ ☐

3. Divide.

$9 \div 3\frac{3}{8} =$ ☐

4. Divide.

$3\frac{1}{7} \div \frac{1}{3} =$ ☐

5. Divide.

$6\frac{3}{10} \div 3 =$ ☐

Name: _____

Summer Week 4 Grade 7 Day 17

1. Mackenzie and her drama class have worked all spring on their production of Shakespeare's *Romeo and Juliet*. They charge $5.50 for each ticket to the show. Mackenzie's drama class made $346.50 in ticket sales on opening night.

   Let t represent how many tickets the drama class sold on opening night. Which equation models the problem?

   $\frac{t}{5.50} = 346.50$ | $5.50t = 346.50$

   Solve this equation to find how many tickets the drama class sold on opening night.

   _____ tickets

2. Colette just got a green and white bookshelf for her bedroom. Now, she wants to paint a design on the wall behind it. The wall has an area of 54 square feet, and Colette plans to paint squares in a checkered pattern. Each square will have an area of 0.25 square feet.

   Let s represent how many squares Colette will paint. Which equation models the problem?

   $0.25s = 54$ | $\frac{s}{54} = 0.25$

   Solve this equation to find how many squares Colette will paint.

   _____ squares

3. Emmett and his dad have been building a go-kart. Today, they're going to Roy's Auto Shop to buy a 4-tire set. The price of each tire comes out to be $53.60.

Let s represent the cost of the set. Which equation models the problem?

$\frac{s}{4} = 53.60$ | $4s = 53.60$

Solve this equation to find the cost of the set.

$ [ ]

4. After renovations in the gym were finished, Coach Murphy decided to paint the school colors on the wall behind the bleachers. The wall is 120 feet wide, and he plans to paint stripes that are 1.5 feet wide.

Let s represent how many stripes Coach Murphy will paint. Which equation models the problem?

$\frac{s}{120} = 1.5$ | $1.5s = 120$

Solve this equation to find how many stripes Coach Murphy will paint.

[ ] stripes

5. Toby's favorite soda is Sugar Buzz, but his mom won't buy it because she says it is way too sugary! The nutrition label on Sugar Buzz shows that a 12-ounce can contains 48 grams of sugar.

Let g represent the amount of sugar in each ounce of Sugar Buzz. Which equation models the problem?

$\frac{g}{12} = 48$	$12g = 48$

Solve this equation to find the amount of sugar in each ounce of Sugar Buzz.

[ ] grams

Name: _____

Summer Week 4 Grade 7 Day 18

1. Factor $5x + 10y$.

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

2. Factor $45w - 72$.

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

3. Factor $21r - 49s$.

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

4. Factor $5s - 15$.

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

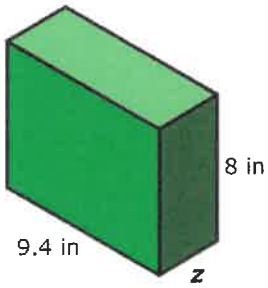
5. Factor $18s - 8t$.

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

Name: _____

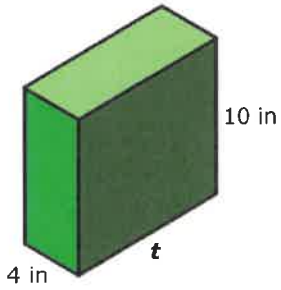
Summer Week 4 Grade 7 Day 19

1. The volume of this rectangular prism is 270.72 cubic inches. What is the value of z?



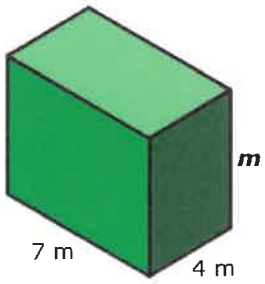
$z =$ ☐ inches

2. The volume of this rectangular prism is 400 cubic inches. What is the value of t?



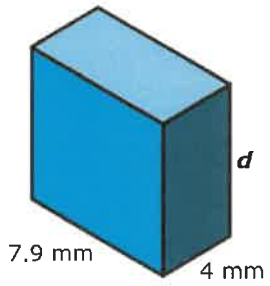
$t =$ ☐ inches

3. The volume of this rectangular prism is 168 cubic meters. What is the value of m?



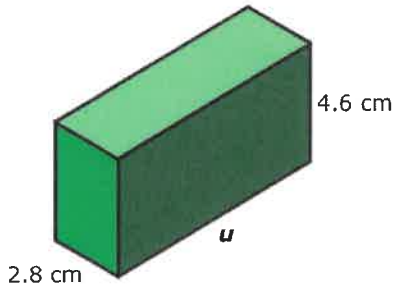
m = ☐ meters

4. The volume of this rectangular prism is 252.8 cubic millimeters. What is the value of d?



d = ☐ millimeters

5. The volume of this rectangular prism is 110.768 cubic centimeters. What is the value of u?



u = ☐ centimeters

Name: _____

Summer Week 4 Grade 7 Day 20

1. Troy set a goal for the total distance he wants to jog this week. He divided his goal evenly among the 5 jogs he planned for the week. Troy determined that each jog should be at least 2.8 miles to meet his goal.

   Let x represent how many miles Troy wants to jog in all. Which inequality describes the problem?

   $\frac{x}{5} \geq 2.8$ | $\frac{x}{5} \leq 2.8$

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

   Troy wants to jog at least [ ] miles in all.

2. Lexi made fruit punch for her Fourth of July party and split it equally among 50 cups. There was more than 8 fluid ounces of punch in each one.

   Let x represent how much punch Lexi made. Which inequality describes the problem?

   $\frac{x}{50} \geq 8$ | $\frac{x}{50} > 8$

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

   Lexi made more than [ ] fluid ounces of punch.

3. Beth and her friends are watching an ice hockey game, so Beth decides to buy 4 cups of hot chocolate to share. She figures she'll spend at least $14 on the hot chocolate in all.

Let x represent how much Beth expects each cup of hot chocolate to cost. Which inequality describes the problem?

$4x < 14$	$4x \geq 14$

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

Beth expects each cup of hot chocolate to cost at least $\$$ ____ .

4. Joy went to a sporting goods store and bought a tennis racket for $78.50. To stick to her budget, she knows she can spend up to $61.50 on new tennis shoes.

Let x represent how much money Joy wants to spend in all. Which inequality describes the problem?

$x - 78.50 \leq 61.50$	$x - 78.50 > 61.50$

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

Joy wants to spend at most $\$$ ____ in all.

5. 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.