

AMI

Day

One

nine

1. Determine if the equation is true if $x=4$

$$2 + 6x = 28$$

2. Determine if the inequality is true if $x=4$

$$x + 13 < 41$$

3. Write an equation to represent the situation:

a. The total cost of five equally priced DVDs is \$55. How much does each DVD cost?

4. Solve the following equation:

$$x + 8 = 23$$

1. Write an equation to represent the situation:

- a. Brand A costs \$46.29 and brand B cost \$42.89. What is the difference in the cost of brand A and B?

2. Solve the following equation:

$$17x = 102$$

3. Solve and graph the following inequality:

$$x - 15 \geq 8$$

4. Write an inequality to represent the situation:

- a. A theater rents their space for \$300 per night. If the company charges \$9 per ticket, what is the least number of tickets that must be sold in order to make a profit?



<p>1. Simplify the expression below:</p> $2(3x - 5y)$	<p>2. Simplify the expression below:</p> $3(7y + 4x)$						
<p>3. Combine like terms:</p> $x + x - x + y + y + y - z + z - z$	<p>4. Match the equivalent expressions below:</p> <table><tbody><tr><td>$x + x + y + y - x$</td><td>$2y + 3x$</td></tr><tr><td>$2(x - 2y)$</td><td>$2x - 4y$</td></tr><tr><td>$x + x + y + y + x$</td><td>$x + 2y$</td></tr></tbody></table>	$x + x + y + y - x$	$2y + 3x$	$2(x - 2y)$	$2x - 4y$	$x + x + y + y + x$	$x + 2y$
$x + x + y + y - x$	$2y + 3x$						
$2(x - 2y)$	$2x - 4y$						
$x + x + y + y + x$	$x + 2y$						

You arrive at your friend's house at 7:45 on Friday night and stay over. Your mom picks you up Saturday morning. The drive home takes 18 minutes. It is 9:22 AM when you get home. How long were you at your friend's house?

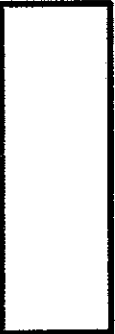
Jarod made \$12.75 mowing lawns one week. He made 3 times as much the following week. How much did he make altogether between the two weeks?


Sandy plays tennis once every 6 six days. Jim plays once every 8 eight days. If they both played tennis today, in how many days will they play on the same day again?

4 out of 100 toys were defective. How many toys would you expect to be defective if 5,000 were manufactured?

AMI
Day
Two

twenty-nine

<p>1. Combine like terms:</p> <p>a. $4x - 3y + 2x + y$</p> <p>b. $-2x + 3y - 4y + 5x$</p>	<p>2. Simplify:</p> <p>d. $2(4x + 5y)$</p> <p>b. $-3(2x + 4y)$</p>
<p>3. Factor out the common terms:</p> <p>d. $2x + 4y$</p>	<p>4. Write an expression to find the perimeter of the rectangle below:</p> <p>$3x - 4$</p> <p>$2x$</p> 

<p>1. Combine like terms:</p> <p>d. $-6m + 7p - 3m + p$</p> <p>b. $3p - 3m - 3m + 3p$</p>	<p>2. Simplify:</p> <p>d. $4(3m - 8p)$</p> <p>b. $-3(7m - 3p)$</p>
<p>3. Factor out the common terms:</p> <p>d. $6m - 21p$</p>	<p>4. Write an expression to find the perimeter of the rectangle below:</p> <p>$2 - x$</p> <p>$4x$</p> 

On a 20 question test, Sarah got 2 questions wrong. What percent of the test does she have correct?

You spent \$24 more than Pam. If you spent \$82, how much money did Pam spend? Write and solve an equation.

4 out of 5 people have at least 1 pet at home. Out of 300 people, how many would you expect to not have any pets?

A piece of paper is inches wide. You tape 7 pieces of paper together to make a banner. How long is your banner?

Which is a better deal: 30 fluid ounces of shampoo for \$3.55 or 50 fluid ounces of shampoo for \$6?

To rent a room for a party it costs \$80 plus an additional \$15 per hour. How much will it cost to rent a room for 5 hours?

Your bill comes to \$23.55 at a restaurant. How much money should you leave for a 20% tip?

You want to start a necklace making business. You spend \$0.68 on string for each necklace and \$0.25 on beads for each necklace. You sell your necklaces for \$2.00 each. If you sell 30 necklaces, how much profit will you make?

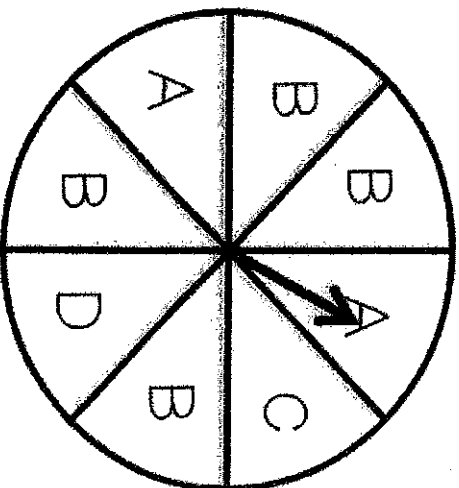
**AMI
Day
Three**

ninet

1. Label each situation below as impossible, unlikely, or likely.

- a. choosing an ace in a deck of cards
- b. choosing a heart, spade, or diamond card in a deck of cards
- c. going swimming in January
- d. pizza for lunch in the cafeteria this month

2. What is the probability of spinning a A or C if the spinner is spun 400 times?



ninety-fo

1. A number cube is rolled 20 times. Use, the results below to answer the questions:

number	times rolled
1	1
2	5
3	5
4	2
5	3
6	4

- a. experimental probability of rolling a 0
- b. experimental probability of rolling a 3
- c. theoretical probability of rolling a 5

2. A deck of game cards each have a different shape on them. 12 have a diamond, 8 have a square, 5 have a circle. What is the probability of drawing a square or circle?

3. The word "Mississippi" is spelled in scrabble tiles. If one letter is chosen at random, what is the probability that it is an "s"?

ninety-five

1. A number cube is rolled 20 times. Use, the results below to answer the questions:

number	times rolled
1	0
2	4
3	3
4	6
5	5
6	2

- experimental probability of rolling a 1 or 4
- experimental probability of rolling a 5 or 3
- theoretical probability of rolling an even

2. What is the probability of rolling a 2 or 5 on a six sided number cube?

3. What is the probability of drawing a face card in a 52 card deck of playing cards?

ninety-si

1. A number cube is rolled 20 times. Use, the results below to answer the questions:

number	times rolled
1	3
2	3
3	5
4	2
5	3
6	4

- d. experimental probability of rolling a 0 or 4
- b. experimental probability of rolling a 3 or 6
- c. theoretical probability of rolling a a number greater than 4

2. A sewing bag contains 9 gold and 8 black buttons. How many gold buttons need to be added to the sewing bag so that there are 60% gold buttons?

3. The word "school" is spelled in scrabble tiles. If one letter is chosen at random, what is the probability that it is an "o"?

**AMI
Day
Four**

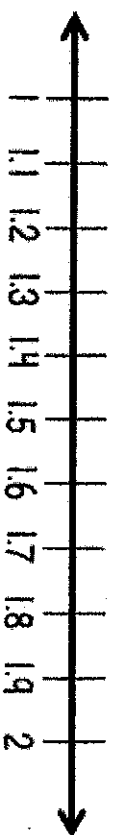
seventeen

1. Change $0.\overline{4}$ to a fraction:

2. Change $0.\overline{27}$ to a fraction:

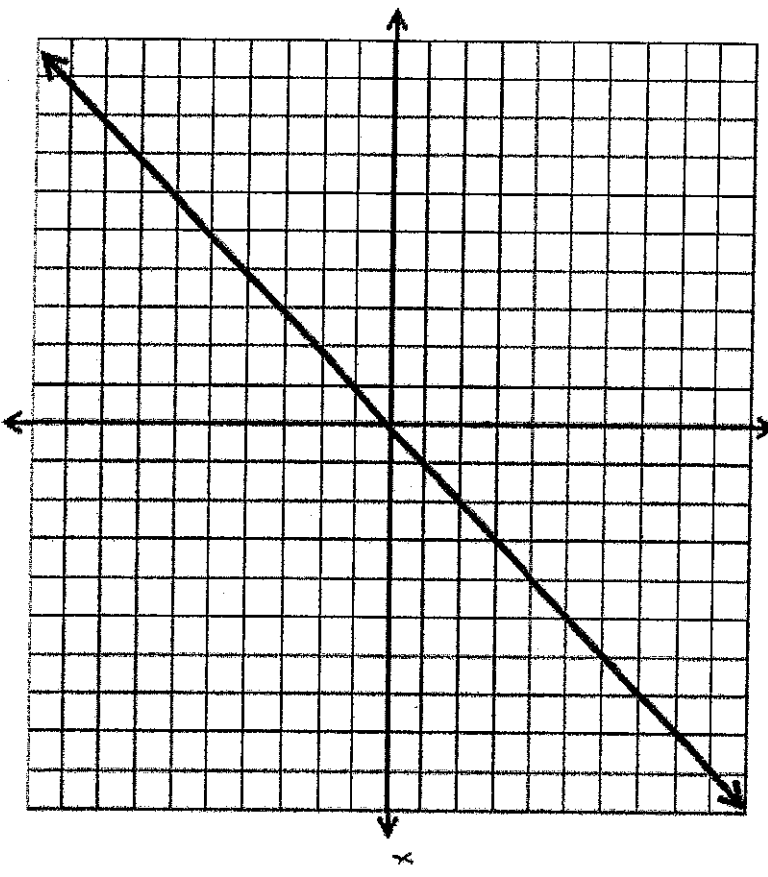
3. Approximate which two integers $\sqrt{30}$ is between.

4. Place $\sqrt{2}$ in the appropriate place on the number line.



thirty-two

1. Use the graph to answer the questions:

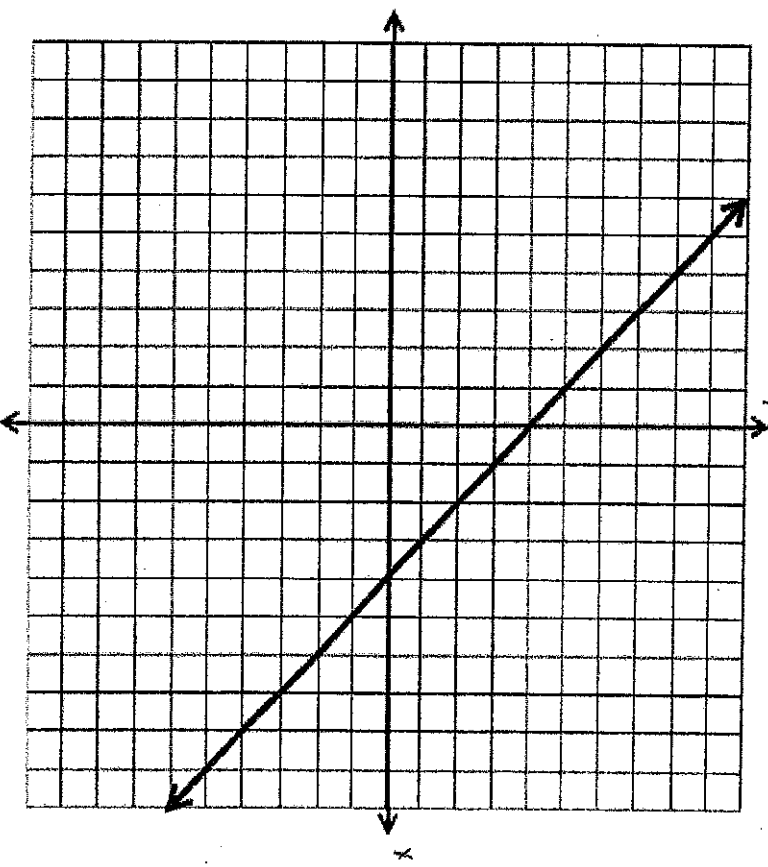


d. $m =$

b. y -intercept =

c. equation:

2. Use the graph to answer the questions:



d. $m =$

b. y -intercept =

c. equation:

Cassandra needs $5\frac{1}{2}$ yards of fabric to make her dress. She has $3\frac{5}{6}$ yards already. How much more does she need?

You go to "Ice Cream Palace" for dessert one day. You can get vanilla, chocolate, or twist ice cream. You have a choice of rainbow sprinkles, chocolate sprinkles, or no sprinkles. You can get your ice cream in a cup or a cone and they each come in small, medium, and large sizes. How many different combinations are there in all?

I have a box that is 5 inches wide, 2 inches deep, and 4 inches tall that I want to fill with sand. How much sand can I fit inside my box?

Tickets to a hockey game cost \$45. You and 3 of your friends decide to go together. How much will your tickets cost all together?

Your macaroni and cheese recipe calls for $1\frac{2}{3}$ cups of milk. You're having company and you need to quadruple the recipe. How much milk will you need?

You flip a coin three times. What is the probability that you get heads all three times?

You have 4 yards of ribbon. You need to wrap 6 equal sized boxes with the ribbon. How many feet of ribbon can you use on each box?

Your town got 3.44 inches of rain in June, 5.07 inches in July, and 4.28 inches in August. What was the average rainfall over these three months?

**AMI
Day
Five**

ninety-seven

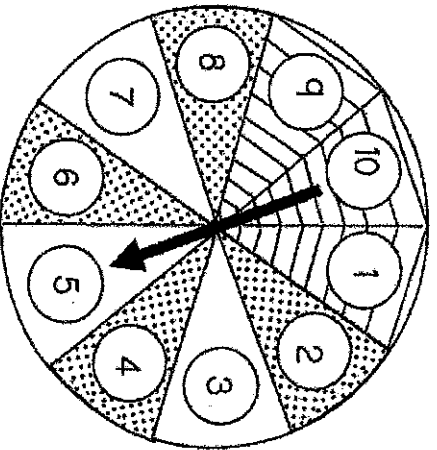
1. For breakfast, Harper can choose from oatmeal or scrambled eggs. She can drink milk, orange juice, apple juice, or hot chocolate. Make a list, table, or draw a tree diagram to represent the sample space.

2. What is the probability of rolling an even number on a six sided number cube?

3. What is the probability of drawing a 3, 5, or 7 in a 52 card deck of playing cards?

ninety-eight

1. The spinner is spun twice. What is the probability of spinning a 7 and then landing on stripes?



2. A deck of game cards each have a different shape on them. 12 have a diamond, 8 have a square, 5 have a circle. What is the probability of drawing a circle, replacing it and drawing a diamond?

3. The letters of the word "classroom" are placed in a bag. What is the probability of randomly drawing an "m" on the first draw, replacing it, and then randomly drawing a "s" on the second draw?

fifty-five

1. Write an equation and solve.

Beau was shopping for his girlfriend's Valentine present. He bought her a box of chocolate for \$12.49 and six balloons. In total Beau spent \$19.63 for the chocolate and balloons, how much did each balloon cost?

2. Write an inequality and solve.

Rachel saved the money from her summer job. In August her savings account had \$1250. Each month she must pay her cell phone bill of \$65. After how many months will Rachel have less than \$800 in her account?

fifty-six

1. Write an equation and solve.

Two different companies offer online gaming subscriptions. Company A charges \$45 upfront and then \$10 per month. Company B does not charge an upfront fee but charges \$25 per month. After how many months will the two companies charge the same amount?

2. Write an inequality and solve.

The set up fee for a photo book is \$35. The paper is an additional charge of \$0.80 per page. What is the greatest number of pages that a book can have if the total bill is to be less than \$50?

Crackers contain 12 calories each and cookies contain 52 calories each. If you eat 5 crackers and 2 cookies, how many calories have you consumed in all?

184 sixth graders are going on a field trip. There needs to be one chaperone for every four students. If a bus can hold 50 people, how many busses will they need for the trip?

Jenny bought a pair of pants for \$19.99 and two shirts for \$7.50 each. If she gave the cashier \$40.00, how much change did she receive? (Assume there is no sales tax.)

A video game you want costs \$59.29 at Games R Us. The same game costs \$45.88 online, but you also have to pay \$6.35 in shipping and handling. How much money will you save if you buy the game online?

You and your friend share a package of candies. You eat twice as many candies as your friend. If there were 36 candies in the bag, how many did you eat?

Molly gets an allowance of \$25 per week. If she spends \$3 each day Monday - Friday on lunch, and saves the rest, how much money will she have saved after 4 weeks?

A group of 5 friends went out to dinner. The total bill including the tax and tip came to \$83.95. If they split the bill evenly, how much money does each person owe?

Jamal is 5 inches taller than Ben and 2 inches shorter than Lacy. Lacy is 9 inches taller than her brother Zach. Zach is 4 ft 3 inches tall. How tall is Ben?