UNION COUNTY
TEAMS
CHARTER SCHOOL

Union County T.E.A.M.S. Charter School and High School/College Leadership Academy
515-517 West 4th Street Plainfield, NJ 07060 908.754.9043 * FAX 908.754.7790

July 2015

SUMMER PACKET LETTER
(Incoming 7th Graders)

Dear Incoming **Seventh Grade** Students and Parents/Guardians,

Happy Summer!!! We trust by now that you are staying cool and enjoying your days off from School. Summer is a great time to relax but it is also a time to read and practice your skills in order to be prepared for the upcoming school year. We have prepared a standards-based Summer Packet with Language Arts and Math activities to support us in decreasing summer learning loss and increase critical thinking.

This Summer Packet is designed to provide 7th grade students with practice for reading comprehension, writing, public speaking and basic math problem solving. **You will have to print the packet out to complete.**

Parents/Guardians may need to offer assistance towards pacing your child for the remainder of July and the month of August with (do **NOT** wait to the last minute):

1. ■Reading the required books as per your grade level
2. ■Completing the reading assignments/activities as per your grade level
3. ■Completing the math assignments as per your grade level

Summer Packets are due on **Monday, September 14, 2015** to your Homeroom Teacher. Your child will receive a grade for the packet.

If you have any questions, please feel free to call the school at 908-754-9043.

Happy Reading, Writing and Problem Solving!!!!

Your Partner in Teaching and Learning,
Brian A. Albanese
Director of Instruction/Principal K-8

REMINDER: FIRST DAY OF SCHOOL IS THURSDAY, SEPTEMBER 3, 2015

UC Teams Charter School

Summer Reading List 2015

7th Grade

Uglies by Scott Westerfield

Out of the Dust by Karen Hesse

Name _____

Summer Reading Assignment Incoming Grade 7

Book: *Out of the Dust* by Karen Hesse

Part A: As you read the book, you will trace the character development of the main character, Billy Jo. On the left column describe the trait the character is demonstrating in each section of the novel, in the second column, select a quote from this section that best reveals the trait, and in the third column, explain how this quote reveals that personality trait. You can choose a trait from the word bank or create one of your own. Use each trait only once.

Courageous, Persistent, Decisive, Unselfish, Resourceful, Loyal, Cleve, Compassionate, Honest, Mature, Level-headed , Responsible, Imaginative, Self-confident, Thoughtful , Risk-taker, Trustworthy

TIME Season Date page	TRAIT	QUOTE/AUTHOR'S NAME AND PAGE #	EXPLANATION
Winter 1934 (pp.37-50)			
Spring 1934 (pp. 55-84)			
Summer 1934 (pp. 87-95)			
Autumn 1934 (pp. 87-95)			
Winter 1935 (pp. 99-148)			
Spring 1935 (pp. 153-189)			
Summe 1935 (pp. 193-227)			
	Intelligent	"I can ask her something in such a way I annoy her just enough to get an answer, But not so much I get a no" (Hesse 12).	Billy Jo shows how **intelligent** she is when she explains that she knows just how far to push her mother in other to get what she wants. This shows she is perceptive and aware of her mother's limits.

Part B: There are several themes or big ideas in Karen Hesse's Out of the Dust: loss, forgiveness, family, endurance, adversity, tragedy, and the environment. Choose four themes to create a poster. Divide the poster into four quadrants, putting a theme in each. Use pictures and quotes from the text to show how the theme is represented by the author. Be ready to discuss these themes during the first month of school.

Name_____

Summer Reading Assignment Incoming Grade 7

Uglies by Scott Westerfeld

Answer these questions on a separate sheet of paper.

1. At first, did you hope Tally would get the operation? When did you change your mind? (Or did you?)

2. In what ways did Tally's trip through the wild prepare her for what she learned in the Smoke?

3. Would you give up your ability to think independently in exchange for being happy, beautiful, perpetually healthy, and rich? Would you have the surgery?

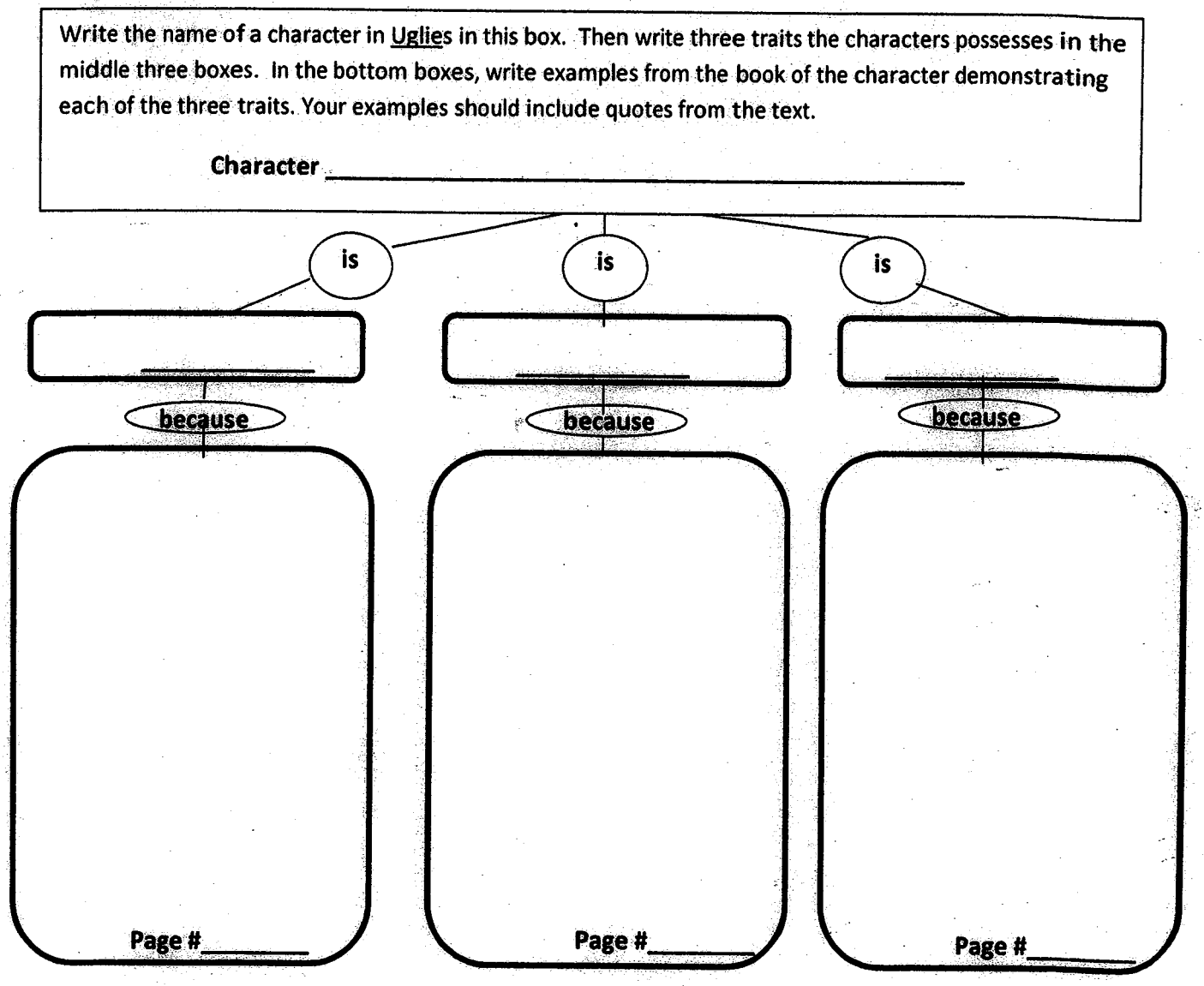
4. How did David see Tally differently than she saw herself?

5. Other than the pretty operation, what are the main differences between the pretty society and our own? (Are there any ways in which the pretty society is healthier than ours?)

6. To what extent did Tally decide her own fate, and how much did other people decide it for her?

7. Beauty, Identity, conformity, happiness, perfection, and love are some themes or big ideas in Uglies. Choose four themes to **create a poster**. Divide the poster into four quadrants, putting a theme in each. Use pictures and quotes from the text to show how the theme is represented by the author. Be ready to discuss these themes during the first month of school.

8. **Characterization Graph**



**** This assignment will be turned in to your Language Arts teacher during the first week of school! ****

Grade 7

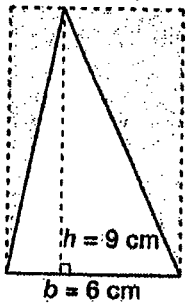
To find the area of a triangle, multiply $\frac{1}{2}$ times the base times the height.

$A = \frac{1}{2}bh$

$A = \frac{1}{2} \cdot 6 \cdot 9$

$A = \frac{1}{2}(54)$

$A = 27 \text{ cm}^2$



To find the area of a trapezoid, multiply $\frac{1}{2}$ times the sum of the bases times the height.

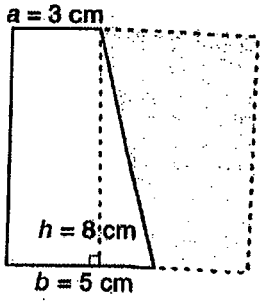
$A = \frac{1}{2}(a + b)h$

$A = \frac{1}{2} \cdot (3 + 5) \cdot 8$

$A = \frac{1}{2} \cdot (8) \cdot 8$

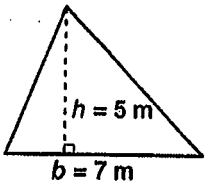
$A = \frac{1}{2} \cdot 64$

$A = 32 \text{ cm}^2$



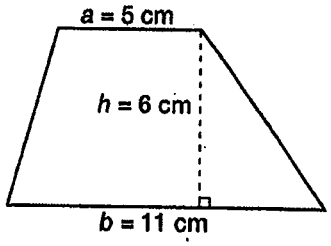
Find the area of each figure.

1.



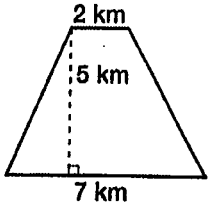
$A =$ _____

2.



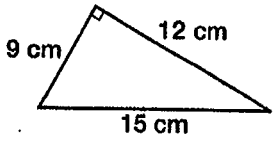
$A =$ _____

4.



$A =$ _____

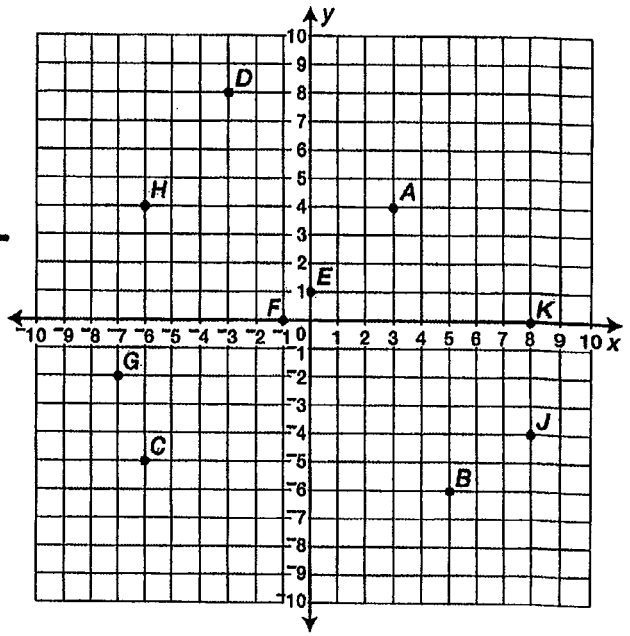
5.



$A =$ _____

An **ordered pair** of integers, such as (2,3), names the location of a point on a **coordinate plane.**

The first integer names the location on the *x*-axis. The second integer names the location on the *y*-axis. The axes intersect at the **origin** (0,0) and divide the plane into four **quadrants.**

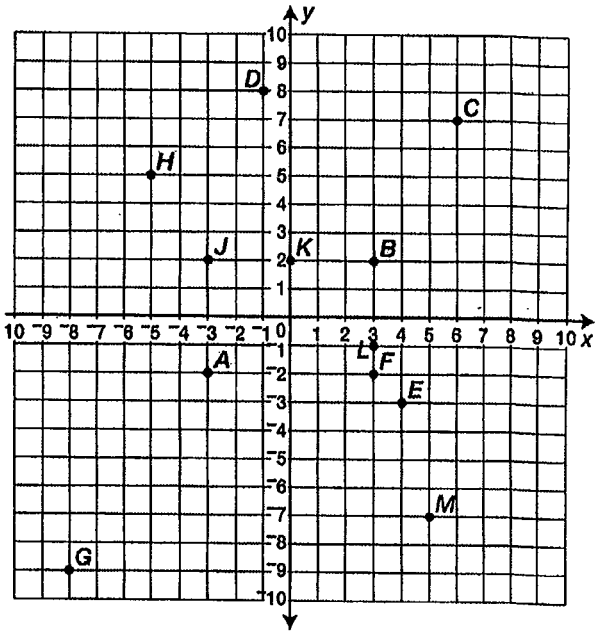


Name the ordered pair for each point.

1. *A* _____
2. *B* _____
3. *C* _____
4. *D* _____
5. *E* _____

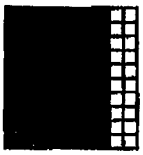
Name the point for each ordered pair on the coordinate plane below.

1. (6,7) _____
2. (3,-1) _____
3. (0,2) _____
4. (-5,5) _____
5. (-3,-2) _____
6. (-3,2) _____



Fractions, Decimals, and Percents

The same number can be named as a fraction, a decimal, or a percent.



$$\frac{80}{100} = \frac{8}{10} = \frac{4}{5}$$
$$\frac{80}{100} = 0.80 = 0.8$$
$$\frac{80}{100} = 80\%$$

To find an **equivalent fraction** in higher terms, multiply both terms by the same number.

$$\frac{4 \times 2}{5 \times 2} = \frac{8}{10}$$

To find an equivalent fraction in lower terms, divide both terms by the same number. Use the greatest common factor (GCF) to find the **lowest terms,** or simplest form.

$$\frac{80 \div 2}{100 \div 2} = \frac{40}{50} \qquad \frac{80 \div 20}{100 \div 20} = \frac{4}{5}$$

Decimals name fractions in place-value form. To change a fraction to a decimal, divide the numerator by the denominator.

$$\frac{4}{5} = 4 \div 5 = 0.80$$

Percents name fractions as a part of 100. To change a percent to a decimal, drop the percent sign, %, and move the decimal point two places to the ***left.***

$$32\% = 0.32$$

To change a percent to a **fraction,** first write it as a decimal. Then change the decimal to a fraction and simplify.

$$32\% = 0.32 = \frac{32}{100} = \frac{8}{25}$$

To change a fraction to a **percent,** first change it to a decimal. Move the decimal point two places to the ***right*** and add a percent sign.

$$\frac{3}{8} = 3 \div 8 = 0.375 = 37.5\%$$

Remember—

The terms of a fraction are the numerator and denominator.

To compare fractions, first write them as equivalent fractions with like denominators.

$$\frac{2}{3} < \frac{3}{4}$$

because

$$\frac{8}{12} < \frac{9}{12}$$

Use the least common multiple (LCM) of the denominators to find equivalent fractions.

To compare decimals, compare digits in the same places. Compare tenths to tenths, hundredths to hundredths, and so on.

$$0.50 > 0.454$$

5 tenths > 4 tenths

Zeros trailing the last significant digit of a decimal do not change its value.

$$50\% = 0.50 = 0.5$$
$$500\% = 5.00 = 5$$

When a fraction divides into a repeating decimal, write the part after the hundredths as a fraction.

$$\frac{1}{3} = 1 \div 3 = 0.3333\ldots$$
$$0.3\overline{3} = 33\tfrac{1}{3}\%$$

Read each problem. Circle the letter of the best answer.

1 A jellyroll is sliced into 12 equal pieces at a bakery. Winton bought 4 pieces. ***About*** what percent of the jellyroll is that?

A 25%
C 35%
B 33.3%
D 40%

Did you choose B? That's correct. Four of 12 pieces equals $\frac{4}{12}$ or $\frac{1}{3}$. Divide to find a decimal: $1 \div 3 = 0.333...$. Change the decimal to a percent: $0.333... = 33\frac{1}{3}\%$, or about 33.3%.

2 Yvonne had 25 stamps. She used 20 of them. Which represents the portion of the stamps Yvonne used?

F 0.4
H $\frac{4}{5}$
G 60%
J $\frac{15}{20}$

3 Ramón cut three lengths of rope. The pieces were 5.35, 5.46, and 5.43 meters long. Which list shows the lengths in order from least to greatest?

A 5.35, 5.43, 5.46
B 5.43, 5.35, 5.46
C 5.35, 5.46, 5.43
D 5.46, 5.43, 5.35

4 Of the 40 students in Irene's class, 30% are girls. How many girls are in Irene's class?

F 10
H 15
G 12
J 30

5 Look at this figure.

Which of these does **not** name the shaded part?

A 0.582
C 0.625
B $\frac{5}{8}$
D $62\frac{1}{2}\%$

6 This table shows how much four people earned and the amount of their earnings they spent.

Person	*Earned*	*Spent*
Fred	$80	$35
Marla	90	35
Juana	100	35
Barry	110	35

Who spent 35% of his or her earnings?

F Fred
H Juana
G Marla
J Barry

7 Hassan ran $\frac{2}{3}$ mile on Tuesday, $\frac{5}{8}$ mile on Wednesday, $\frac{3}{4}$ mile on Thursday, and $\frac{7}{12}$ mile Friday. On which day did he run the farthest?

A Tuesday
C Thursday
B Wednesday
D Friday

8 A sign at a store said all purchases were 40% off. Which is another way this number could have been written?

F $\frac{1}{5}$ off
H $\frac{3}{10}$ off
G $\frac{1}{4}$ off
J $\frac{2}{5}$ off

1 Data

- A **table** is an organized display of **data,** or information.

  This table shows one student's scores on some math tests.

BETHANY'S MATH SCORES	
Test	*Score*
1	86
2	78
3	88
4	78
5	90

To find the **mean,** or average, of a set of data, add the values and divide the sum by the number of values.

What is Bethany's mean test score?

$$86 + 78 + 88 + 78 + 90 = 420$$

$$420 \div 5 = 84$$

Bethany's mean test score is 84.

- To find the **median** in a set of data, first arrange the data in order from smallest to largest. Then look for the number in the middle.

What is Bethany's median test score?

78, 78, (86), 88, 90

Bethany's median score is 86.

Had there been an even number of scores, the median would have been the arithmetic mean of the 2 middle scores.

To find the **mode** of a set of data, look for the value that appears most often.

78, 78, 86, 88, 90

In this set of test scores, the score of 78 appears twice and the rest of the scores appear only once each. So the mode of Bethany's scores is 78.

Remember—
Tables contain data in columns, which go up and down, and rows, which go from left to right. Be sure to look in the correct row and column for the data you need to solve a problem.

The range of a set of data is the difference between the largest and smallest values.

highest score = 90
lowest score = 78
90 − 78 = 12
The range of the scores is 12 points.

The word *median* means *middle.* There should be an equal number of scores to the left and right of the median.

If there is an even number of scores, the median is the mean of the two middle scores.

1, 2, 3, 4
2 + 3 = 5
5 ÷ 2 = 2.5
The median is 2.5.

A set of data has no mode if each value occurs only once.

Read each problem. Circle the letter of the best answer.

1 This set of data shows the number of runs-batted-in (RBI) by five top players on the seventh-grade baseball team.

32, 28, 20, 33, 22

How many of the players were above the mean number of RBIs?

A one **C** three

B two **D** four

Did you choose C? That's correct. First find the mean. Add the values: 32 + 28 + 20 + 33 + 22 = 135. Divide: 135 ÷ 5 = 27. Compare the mean to the values: 32, 28, and 33 are greater than 27.

2 In question 1, how does the mean compare to the median RBIs?

F It's 1 less. **H** It's the same.

G It's 1 more. **J** It's 5 less.

Use this table to answer questions 3 and 4.

TREES SOLD AT A GARDEN CENTER

Kind of Tree	*Price*	*Number Sold*
Red Maple	$22	6
Pin Oak	$36	4
Sweet Gum	$45	3
Blue Spruce	$37	4

3 What is the mean price of a tree?

A $23 **C** $35

B $28 **D** $140

4 Which kind of tree was the most money taken in on?

F Red Maple **H** Sweet Gum

G Pin Oak **J** Blue Spruce

Use this table to answer questions 5–8.

SAILING SHIPS

Name of Ship	*Length in Feet*
Europa	185
Faire Jeanne	110
Grand Nellie	65
Jolly Rover	60
Pride of Many	65

5 How much longer is the *Faire Jeanne* than the *Jolly Rover?*

A 50 feet **C** 75 feet

B 55 feet **D** 175 feet

6 What is the range of the lengths of the ships?

F 25 feet **H** 97 feet

G 65 feet **J** 125 feet

7 The *N.E. Sagres* is a 293-foot-long sailing ship. What fraction of the ships in the table are less than half the length of the *N.E. Sagres?*

A $\frac{1}{5}$ **C** $\frac{3}{5}$

B $\frac{2}{5}$ **D** $\frac{4}{5}$

8 Which statement about the lengths of the ships in the table is true?

F The median is greater than the mean.

G The mean and median are the same.

H The mode is greater than the mean.

J The median and the mode are the same.

2.6 Greatest Common Factor (GCF) Least Common Multiple (LCM)

GCF/LCM

Terminology	Description	Procedure/Example
Greatest Common *Factor* (GCF)	the largest factor a given *group of* numbers has in common	Step 1: *List* the factors of each number in the given group. Step 2: Search for the greatest common factor. For example: Factors of 30: 1, (2), 3, 5, 6, 10, 15, 30 Factors of 16: 1, (2), 4, 8, 16 Two is the greatest common factor.
Least Common Multiple (LCM)	the *smallest* positive integer a given group of numbers can each divide into without a remainder	Step 1: List several multiples of each number in the given group. Step 2: Search for the *first non-zero multiple they have in common.* *For example:* Multiples of 6: 6, 12, 18, (24), 36, 42, 48 Multiples of 8: 8, 16, (24) Twenty-four is the least common multiple.

⊛ GCF - If two numbers do not have GCF greater than 1 the pair is called relatively prime.

Our Turn

Q:

1 What is the greatest common factor (GCF) of 24 and 30?

2 What is the least common multiple (LCM) of 24 and 30?

A:

1 List the factors of 24 and 30

Factors of 24: 1, 2, 3, 4, (6), 8, 12, 24
Factors of 30: 1, 2, 3, 5, (6), 10, 15, 30
The GCF is 6

2 List several multiples of 24 and 30

Multiples of 24: 0, 24, 48, 72, 96, (120), 144
Multiples of 30: 0, 30, 60, 90, (120), 150
The LCM is 120

⊛ Remember: The LCM is a positive integer, therefore 0 is not the LCM.

YOUR TURN

Find the GCF of each of the following pairs of numbers.

1 12 and 30

2 18 and 60

3 24 and 40

4 13 and 52

5 100 and 250

Find the LCM of each of the following pairs of numbers.

6 12 and 30

7 9 and 10

8 8 and 24

9 3 and 7

10 4 and 6

11 What is the greatest common factor (GCF) of the numbers 26 and 39?

A 1
B 3
C 13
D 23

12 If the factors of every positive integer were listed respectively, what number would be on every list?

F 0
G 1
H 2
J 10

13 If a list was made of all the factors of 24 and another list of all the multiples of 24, what number would be on both lists?

A 0
B 1
C 3
D 24

14 What is the least common multiple (LCM) of 2, 6, 12, and 24?

F 2
G 18
H 24
J 36

15 If the multiples of all the positive integers were listed respectively, what number is a multiple of every integer?

A 0
B 1
C 10
D 100

Finding a Percent of a Number

Example: Let's find 30 percent of 400

First change 30% to a decimal by moving the decimal point 2 places to the left.

$$30\% = 0.30$$

Then multiply.

$$0.30 \times 400 = 120$$

30% of 400 is 120.

PRACTICE

Directions: Find the missing number.

1 44% of 46 is what number? _____

2 30% of 70 is what number? _____

3 73% of 79 is what number? _____

4 24% of 100 is what number? _____

5 11% of 18 is what number? _____

6 95% of 49 is what number? _____