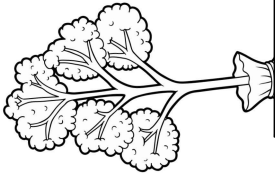


PERCENT APPLICATION: FINDING THE WHOLE

Percents can be helpful in solving real-world problems. Consider thinking through the questions below to help you organize the information and set up the proportion.



What information are you given?

What are you solving for? Is that represented by the part, the whole, or the percent?

Does your solution make sense in the context of the problem?

As a service project, the sixth grade class helped plant trees in a neighborhood park. Thirty-six of the trees were oak trees. This represents 60% of the trees planted. How many trees did the sixth grade class help plant?

- What information do we know?
- What information do we need to know?
- Are we looking for the part, the whole, or the percent?
- Sketch a tape diagram to represent the situation.

100%

- What is the solution? Does the solution make sense in context of the problem?

Set up a tape diagram for each of the word problems below. Do not solve.

1. Bernie repaired twelve bikes last week. This is 33.3% of the bikes he repaired in the month of May. How many bikes did he repair in May?

100%

2. A clothing store has a twenty percent off sale, making a pair of jeans \$9.60 cheaper. What was the full price of the jeans?

100%

Use your understanding of solving for the part, the whole, and the percent to play tic-tac-toe with your neighbor. Be sure to set up a tape diagram or percent proportion in order to solve.

Xs _____ Os _____

<p>Tricia made a 72% on her science test. If she got 18 problems correct, how many questions were on the test?</p>	<p>Donnie made 85% of his field goal attempts last season. If he attempted 60 field goals, how many did he make?</p>	<p>Seventy-five percent of the apple pies were sold on Tuesday, and the remainder were thrown out. If 12 apple pies were sold Tuesday, then how many were thrown out?</p>						
<p>A scarf is made of cotton and polyester. If the scarf weighs 18 ounces, then how much cotton is in the scarf?</p> <table border="1" data-bbox="947 1105 1129 1507"> <thead> <tr> <th>MATERIAL</th> <th>WEIGHT (OZ)</th> </tr> </thead> <tbody> <tr> <td>Cotton</td> <td>65%</td> </tr> <tr> <td>Polyester</td> <td>35%</td> </tr> </tbody> </table>	MATERIAL	WEIGHT (OZ)	Cotton	65%	Polyester	35%	<p>A concert venue sells 16% of its tickets as reserved seats. An upcoming concert sells 8,000 tickets. How many tickets are reserved?</p>	<p>Out of 350 students, 315 went on a class field trip. What percent of the students did not go on the class field trip?</p>
MATERIAL	WEIGHT (OZ)							
Cotton	65%							
Polyester	35%							
<p>A baseball hat is on sale for 15% off, which is \$2.70. How much does the baseball hat cost at full price?</p>	<p>The school book fair has 72 non-fiction books and 328 fiction books for sale. What percent of the book fair is non-fiction books?</p>	<p>Jack is learning to save, spend, and give his money away. He has determined to give away 10% of his summer job earnings. If he gives away \$256, how much did he earn this summer?</p>						

Summarize today's lesson:

PERCENT APPLICATION: FINDING THE WHOLE

Match each correct answer to a letter and complete the riddle below. Not all choices will be used.

<p>1 A toy manufacturer estimates that 6% of its products are defective. If it produces 550 toys in one day, then how many will be defective?</p>	<p>5 Mr. Hollins determines that he gives away \$800 each month. If he gives away 16% of his budget, then how much is his overall budget?</p>
<p>2 Fourteen percent of the town's population are above the age of 65. If there are about 320 residents over the age of 65, then what is the town's population?</p>	<p>6 Eddie is reading a novel for English class. He has read 173 out of 480 pages. About what percent of the book has Eddie read?</p>
<p>3 In 2014, the number of home runs hit by the LA Dodgers accounted for 6% of the 583 total home runs hit in the MLB. Approximately how many home runs did the LA Dodgers hit?</p>	<p>7 A nutrition label states that there are 36g of carbohydrates in each serving. This accounts for 12% of a daily value. How many grams of carbohydrates are recommended per day?</p>
<p>4 Two of the dozen eggs in a carton are cracked. About what percent of the carton is not cracked?</p>	<p>8 About 56% of the 2,553 students are enrolled in at least one honors class. How many students are enrolled in an honors class?</p>

T: 33	O: 25	C: 36	J: 4	M: 517
K: 64	Q: 45	L: 2,286	A: 35	P: 4,559
H: 128	G: 83.3	I: 800	E: 300	R: 5,000
V: 45	N: 1,430	S: 80	D: 1,129	B: 16.6

WHAT DO YOU CALL A DESTROYED ANGLE?

3 _____ 5 _____ 7 _____ 1 _____ 3 _____ 8 _____ 2 _____ 7 _____