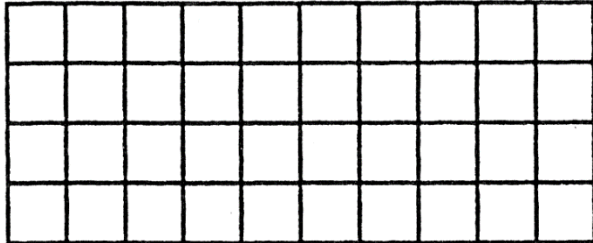


1. What is a percent?

2. Shade 6 of the small squares in the rectangle below.



3. Figure out what percent of the rectangle is shaded. You may not write an equation and solve it. You must use the picture or a new picture to find the percent and explain how you figured it out.

4. It is difficult to compare fractions when they have different denominators. When we turn a fraction into a percent, the comparison is easier because percents all have a common denominator of 100. For example, you would have to do additional arithmetic to decide if  $\frac{6}{40}$  is greater than, less than, or equal to  $\frac{68}{460}$ . But it is easy to see that 15% is greater than 14.8%. Complete the table to review changing fractions and decimals to percents:

Fraction	Decimal	Percent
1/5	0.2	20%
98/86		
		0.45%
	6.71	

5. You have learned several ways to solve a proportion.

Problems involving percents can be solved using “The Percent Proportion”, which is used to convert one fraction into an equivalent fraction with a denominator of 100.

$$\frac{\textit{amount}}{\textit{total}} = \frac{\textit{percent number}}{100}$$

Write a proportion to help you find the number that is 15% of 40:

6. Work with your squish partner to write and solve proportions for each of the following percent problems:

a) What percent of 25 is 20?

b) \$12.75 is what percent of \$50?

c) What number is 5% of 60?

d) 12% of 85 is what number?

e) 40% of what number is 26?

f) 84 is 75% of what number?

7. A local bakery sold 60 loaves of bread in one day. If 65% of these were sold in the afternoon, how many loaves were sold in the afternoon?

8. Brand A cereal contains 10 cups of cereal. Brand B claims to have 30% more cereal than Brand A. How many more cups of cereal are in Brand B cereal?

9. Is 40% of 70 equal to 70% of 40?  
Could this pattern be true for other numbers? Prove it.