

December 12, 2012  
Math Bowl – Ratio, proportion

1. If a train moves at a constant speed of 7m/s, how many meters does the train travel in 1 hr?

## Proportions Worksheet 22

1a. A boat can travel 6 miles on 1 gallons of gasoline. How far can it travel on 34 gallons?

1b. A car can travel 130 kilometers on 13 liters of gasoline. How far can it travel on 38 liters?

2a. A boat can travel 56 miles on 8 gallons of gasoline. How far can it travel on 67 gallons?

2b. A car travels 91 miles in 3 hours (with a constant speed). How far can it travel in 11 hours (with the same speed)?

# Proportion to Percentage

12/12/12

To find the percentage of a proportion, divide the proportion by the whole and move the decimal point. Example: What is the percentage for 30 of 50? Divide 30 by 50 and move the decimal point to the right 2 places and append the percent sign:  $30 \div 50 = 0.6$  When you move the decimal point to the right by 2 places and add the percent sign, you have 60%

Use the same method to find to solve the problems below.

5. 50 of 100 = \_\_\_\_\_%

15. 12 of 32 = \_\_\_\_\_%

6. 25 of 100 = \_\_\_\_\_%

7. 75 of 100 = \_\_\_\_\_%

17. 16 of 50 = \_\_\_\_\_%

8. 35 of 40 = \_\_\_\_\_%

9. 30 of 60 = \_\_\_\_\_%

19. 10 of 10 = \_\_\_\_\_%

20. 10 of 100 = \_\_\_\_\_%

## Percentage Practice

To find the percent of a number, change the percent to a decimal and multiply.

Example: What is 30% of 50? Convert the percentage to a decimal by moving the decimal point two places to the left and remove the percent sign:  $30\% = .30$  You then multiply  $.30 \times 50$  to find the percent:  $.30 \times 50 = 15$  15 is 30% of 50.

Use the same method to solve the problems below.

1. The Sweater Shack is offering a 20% discount on sweaters. If the regular price of a sweater is \$15.00, what is the discount? \_\_\_\_\_ Subtract the discount you found from the regular price to find the sale price. \_\_\_\_\_
2. There are 30 students in Mrs. Jones class. Twenty percent of the students received an A on the last math test. How many students received an A? \_\_\_\_\_
3. Your parents took your family out to dinner. Your parents wanted to give the waiter a 15% tip. If the total amount of the dinner was \$42.00, what should be paid to the waiter as a tip? \_\_\_\_\_
4. Jean Junction is selling jeans at 15% off the regular price. The regular price is \$25.00 per pair. What is the discount? \_\_\_\_\_