

Name: Key
Date: _____

Mr. Johnson
Math 8

Lesson 5.2 – Calculating Percents

Investigate:

Complete the Investigate Activity on page 242 of your textbook. Work with a partner a copy the 'T' shape onto a piece of provided grid paper. Once you are completed the activity, answer the 'Reflect & Share' questions.

Notes:

Recall these basic facts regarding fractions and decimals:

$$100\% = \underline{1.0}$$

$$10\% = \underline{0.1}$$

$$1\% = \underline{0.01}$$

We can also extend these basic facts to use with percents greater than 100% or less than 1%. For instance:

$$101\% = \underline{1.01}$$

$$201\% = \underline{2.01}$$

$$0.1\% = \underline{0.001}$$

$$0.05\% = \underline{0.0005}$$

Examples:

1. A store has bought snowboards for \$50 from the manufacturer. The selling price to the consumer is 320% of the manufacturer's price. What is the price that consumers will be paying for the snowboard? How much profit has the store made?

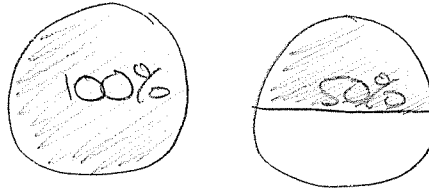
$$\begin{aligned} \text{Consumer price} &= \$50 \times 3.2 \\ &= \$160 \end{aligned}$$

$$\begin{aligned} \text{Profit} &= \text{consumer price} - \text{manufacturer price} \\ &= \$160 - \$50 \end{aligned}$$

$$= \$110$$

2. Draw a diagram to express the following percents

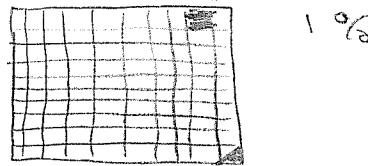
a. 150%



b. 200%



c. 1%

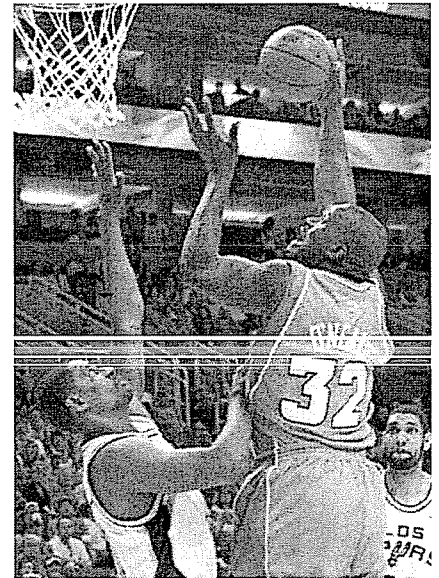


d. 0.5%



3. Professional athletes are notorious for saying "I am going to give it 110%." Can you explain this comment using math? Do you think it is possible to give 110%?

The most you can possibly give is 100% of your effort. To give 10% more in this context is unrealistic.



Assignment:

Pg. 245-247
#s 1, 4-9