

FEBRUARY 13, 2012

MTR

~~GET OUT @S!! FROM FRIDAY~~

Due Tuesday

**Student
Assessments!**

2/13 - Percent Increase and Decrease

Which is the better deal?

1. Allowance went from \$5 every week to \$7 every week
2. Allowance went from \$22 every month to \$26 every month



"Percent increase"
shows how much
bigger a number is
compared to the original.

So.....

$$\frac{\%}{100} = \frac{\text{amount of increase/decrease}}{\text{original amount}}$$

1. Allowance went from \$5 every week to \$7 every week

$$\frac{P}{100} = \frac{20 \cdot 2}{20 \cdot 5} \leftarrow \frac{7-5}{5}$$

$$P = 40\%$$

increase

2. Allowance went from \$22 every month to \$26 every month

$$\frac{P}{100} \neq \frac{4}{22}$$

$$\frac{22P}{22} = \frac{400}{22}$$

$$P = 18.2\% \text{ inc.}$$

$$400 \div 22 = 18.18181818182$$

Which is a better sale?

1. from \$24 to \$18

$$\frac{P}{100} = \frac{6}{24}$$

$$\frac{24P}{24} = \frac{600}{24}$$

$$P = 25\% \text{ decrease}$$

$$600 \div 24 = 25$$

2. from \$50 to \$40

$$\frac{P}{100} = \frac{2 \cdot 10}{2 \cdot 50}$$

$$P = 20\% \text{ decrease}$$

$$\frac{\%}{100} = \frac{\text{amount of increase/decrease}}{\text{original amount}}$$

Find each percent change. Round to the nearest tenth of a percent. State if it is an increase or decrease.

From 56 to 30

$$\frac{P}{100} = \frac{26}{56} \quad \begin{array}{r} 56 \\ -30 \\ \hline 26 \end{array}$$

$$\frac{56p}{56} = \frac{2600}{56}$$

$$p = 46.4\% \text{ dec.}$$

$$2600 \div 56 = 46.4285714285714$$

From 54 to 79

$$\frac{P}{100} = \frac{25}{54} \quad \begin{array}{r} 79 \\ -54 \\ \hline 25 \end{array}$$

$$\frac{54p}{54} = \frac{2500}{54}$$

$$p = 46.3\% \text{ inc.}$$

$$2500 \div 54 = 46.2962962962963$$

From 66 miles to 87 miles

$$\frac{P}{100} = \frac{21}{66} \quad \begin{array}{r} 87 \\ -66 \\ \hline 21 \end{array}$$

$$\frac{66p}{66} = \frac{2100}{66}$$

$$p = 31.8\% \text{ inc.}$$

$$2100 \div 66 = 31.8181818181818$$

From 62 inches to 22 inches

$$\frac{P}{100} = \frac{40}{62}$$

$$\frac{62p}{62} = \frac{4000}{62}$$

$$p = 64.5\% \text{ dec.}$$

$$4000 \div 62 = 64.5161290322581$$

HOMEWORK

Gold PERCENT WS5

DUE Tuesday