

TH-A1 Algebra 1 Week 21 2/23

1.) what percent of 80 is 54?

$$\begin{array}{ccccccc}
 & & \downarrow & & \downarrow & & \downarrow \\
 X & * & 80 & = & 54 & &
 \end{array}$$

$$\frac{80x}{80} = \frac{54}{80}$$

$$X = 0.675 * 100 =$$

67.5%

2.) 96 is what percent of 120?

$$\begin{array}{ccccccc}
 & & \downarrow & & \downarrow & & \downarrow \\
 96 & = & X & * & 120 & &
 \end{array}$$

$$\frac{96}{120} = \frac{120x}{120}$$

3.) 62% of 90 is what number?

$$\begin{array}{ccccccc}
 & & \downarrow & & \downarrow & & \downarrow \\
 0.62 & * & 90 & = & X & = &
 \end{array}$$

$$X = \frac{96}{120} = 0.8 * 100 =$$

80%

4.) 48 is 36% of what number?

$$\begin{array}{ccccccc}
 & & \downarrow & & \downarrow & & \downarrow \\
 48 & = & 0.36 & * & X & &
 \end{array}$$

$$\frac{48}{0.36} = \frac{0.36x}{0.36}$$

X = 133.3

5.) What number is 14% of 180?

$$\begin{array}{ccccccc}
 & & \downarrow & & \downarrow & & \downarrow \\
 X & = & 0.14 & * & 180 & &
 \end{array}$$

25.2

Percent Increase and decrease

Average Salary

1980 → \$21,000

2020 → \$58,000

$$\frac{\text{New} - \text{old}}{\text{old}} * 100\%$$

$$\frac{58,000 - 21,000}{21,000} * 100\%$$

$$\frac{37,000}{21,000} * 100\% = \boxed{176\%}$$

Average Price for House

1980 - \$47,000

2020 - \$288,000

$$\frac{\text{New} - \text{old}}{\text{old}} * 100\%$$

$$\frac{288,000 - 47,000}{47,000} * 100\% = \boxed{513\%}$$

1980

2020

176%

	1980	2020	$\frac{\text{new-old}}{\text{old}} * 100\%$
Gas	\$1.19	\$3.20	$\frac{3.20 - 1.19}{1.19} * 100\% = 169\%$
Bread	0.50	\$1.45	$\frac{1.45 - 0.5}{0.5} * 100\% = 290\%$
Minimum Wage	\$3.10	\$7.25	$\frac{7.25 - 3.10}{3.10} * 100 = 134\%$
TV	\$670	\$400	$\frac{400 - 670}{670} * 100 = -40\%$ decrease
video game	\$35	\$65	$\frac{65 - 35}{35} * 100\% = 86\%$
Car	\$7,000	\$42,500	$\frac{42,500 - 7,000}{7,000} * 100 = 507\%$
movie ticket	\$3.55	\$9.17	$\frac{9.17 - 3.55}{3.55} * 100 = 158\%$