

MARCH 12, 2015^{4TH}

STARTER You will need a calculator!!!

Find the percent change and indicate if it is an increase or decrease.

1. from 25 to 30 $\frac{30}{25}$

$$\frac{5}{25} \times \frac{P}{100}$$

$$\frac{500}{25} = \frac{25P}{25}$$

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

2. from 25 to 15

$$\frac{10}{25} \times \frac{P}{100} \quad P = 40\% \text{ dec}$$

$$\frac{25P}{25} = \frac{1000}{25}$$

3. from 120 to 36

$$\frac{84}{120} \times \frac{P}{100} \quad P = 70\% \text{ dec}$$

$$\frac{120P}{120} = \frac{8400}{120}$$

4. from 24 to 76

$$\frac{52}{24} \times \frac{P}{100}$$

$$\frac{5200}{24} = \frac{24P}{24}$$

$$P = 216.7\% \text{ inc}$$

3/12 - Simple Interest

What IS interest?

\$ paid on \$ loaned

\$ earned on \$ in the bank



$$I = prt$$

Interest

principle (\$)

rate (% as a deci)

time (years)

\$100 at 5% for 6 years

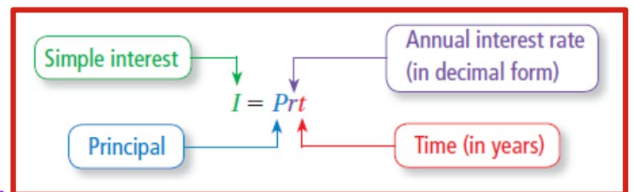
$$I = prt$$

$$I = (100)(0.05)(6) \\ = \$30$$

$$100 \times 0.05 \times 6 = 30$$

Ending Balance:

$$\begin{array}{r} \$100 \\ + 30 \\ \hline \$130 \end{array}$$



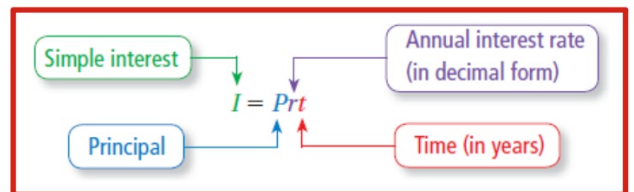
\$4,800 at 14% for 4 years

$$I = prt$$

$$= (4800)(.14)(4)$$
$$= \$2688$$

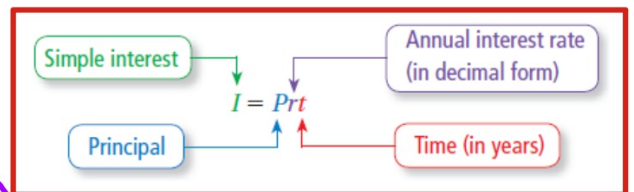
$$4800 \times 0.14 \times 4 = 2688$$

$$\begin{array}{r} \$4800 \\ + 2688 \\ \hline \boxed{\$7488} \end{array}$$



\$175 at 7% for 8 years

$$\begin{aligned} I &= prt \\ &= (175)(.07)(8) \\ &= \$98 \end{aligned}$$



$$175 \times 0.07 \times 8 = 98$$

$$\begin{array}{r} \$ 175 \\ + 98 \\ \hline \boxed{\$ 273} \end{array}$$

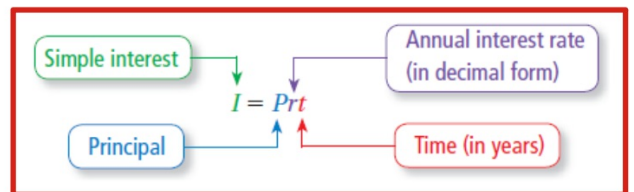
Ending Balance

\$7,400 at 3% for 2 years

$$\begin{aligned} I &= prt \\ &= 7400(.03)2 \\ &= 444 \end{aligned}$$

$$7400 \times 0.03 \times 2 = 444$$

$$\begin{array}{r} \$ 7400 \\ + 444 \\ \hline \$ 7844 \end{array}$$



HOMWORK

Lilac WS 5

DUE Monday