

MARCH 12, 2015 ^{5TH} ^{6TH}

STARTER

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

1. from 25 to 30

$$\frac{5 \cdot 4}{25 \cdot 4} = \frac{P}{100}$$

$$20\% = P$$

inc.

2. from 25 to 15

$$\frac{10 \cdot 4}{25 \cdot 4} = \frac{P}{100}$$

$$40\% \text{ dec.} = P$$

3. from 120 to 36

$$\frac{84}{120} = \frac{P}{100}$$

$$120P = 8400$$

$$P = 70\% \text{ dec.}$$

4. from 24 to 76

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

$$24P = 5200$$

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

3/12 - Simple Interest

What IS interest?
\$ you earn by putting
\$ in the bank.



$$I = prt$$

Interest

Principle — \$

rate — % as a decimal

time — years

\$100 at 5% for 6 years

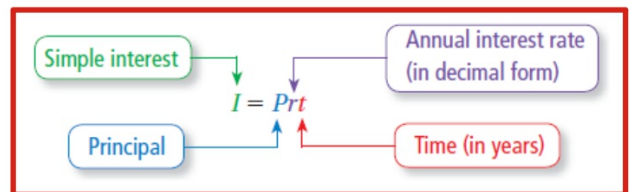
$$I = prt$$
$$= (100)(.05)(6)$$

= \$30 interest

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

Find the ending balance.

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



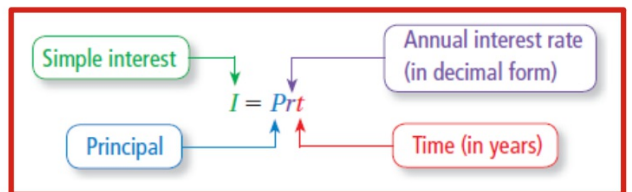
\$4,800 at 14% for 4 years

$$I = prt$$

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

Balance:

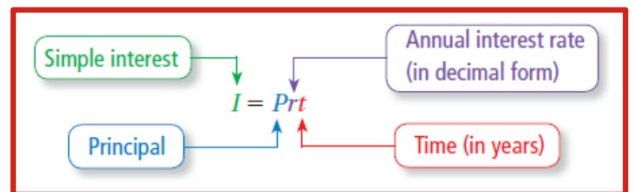
$$\begin{array}{r} 4800 \\ + 2688 \\ \hline \$ 7488 \end{array}$$



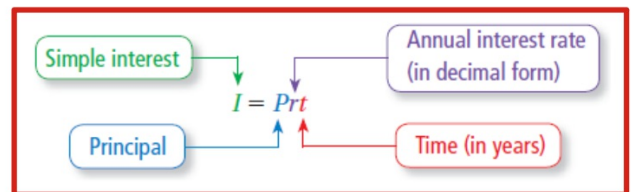
\$175 at 7% for 8 years

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

$$\begin{aligned} \text{Balance} \\ &98 + 175 \\ &= \$273 \end{aligned}$$



\$7,400 at 3% for 2 years



HOMWORK

Lilac WS5

DUE Monday