

Warm up:

You invest \$5300 at 6.25% simple interest for 7 months. How much money will be in your account after 7 months?

$$I = prt$$

$$5300(0.0625)\left(\frac{7}{12}\right)$$

$$193.2291667$$

$$193.23$$

$$+ 5300$$

$$\underline{\$ 5493.23}$$

HW Solutions

$$\begin{aligned} & \textcircled{G} \quad 1345(0.0725)\left(\frac{1}{12}\right) \\ & \quad \quad \quad 8.13 \\ & \quad \quad \quad + 1345 \\ & \quad \quad \quad \hline & \quad \quad \quad \$1353.13 \end{aligned}$$

(8)

$$1050(0.046)^2$$

$$96.6$$

$$\$96.60$$

QD

$$4200(0.06)(4)$$

$$1008$$

$$+ 4200$$

$$\$5208$$

yes

$$\textcircled{10} \quad 500 (0.0375) \left(\frac{4}{12}\right)$$
$$\textcircled{\$6.25}$$

⑥

0.3 (7.34)

2.202

\$2.20

1.50
1.50
0.30
0.30
0.30
0.65
2.79
7.34

⑨ 1.08(16)

\$17.28

$$\begin{array}{r}
 (14) \quad 4.75 \\
 42 \\
 42 \\
 \hline
 88.75 \\
 \times 0.15 \\
 \hline
 \$13.31
 \end{array}$$

$$\begin{array}{r}
 119 \\
 8.88 \\
 \hline
 127.88 \\
 \times 0.15 \\
 \hline
 \$19.18
 \end{array}$$

$$\frac{19.18 - 13.31}{13.31} = \frac{5.87}{13.31} = 0.441021788$$

(44.10%)

(10)

$$\begin{array}{r} 7.66 \\ 6.78 \\ + 2.49 \\ \hline 16.93 \end{array}$$

9.31

$$\frac{16.93 - 9.31}{16.93} = \frac{7.62}{16.93} = 0.4500886$$

45.01%

$$\begin{array}{r} \textcircled{17} \quad 100\% \\ + 170\% \\ \hline 270\% \end{array}$$

$$\frac{2.7x}{2.7} = \frac{2.07}{2.7}$$

$$x = 0.77$$

$$\textcircled{\$0.77}$$

⑤ 2.40

$$\frac{3.10 - 2.40}{3.10} = \frac{0.50}{3.10}$$

16.13%

(19)

34.95

$$\frac{59.99 - 34.95}{34.95}$$

$$\frac{25.04}{34.95}$$

0.716452074

71.65%

Showdown



Tom measured the mass of a piece of gold to be 153g but the actual mass was 160g. What was the percent error?

$$\frac{160-153}{160} = \frac{7}{160} = 0.04375$$

$$4.38\%$$

Michelle borrowed \$16,000 at 14.2% simple interest for 5 years. How much total money does she need to pay back?

$$16000(0.142)(5)$$

$$\begin{array}{r} 11360 \\ + 16000 \end{array}$$

$$\underline{\$ 27360}$$

At Macy's, hats that regularly cost \$35 are on sale for \$12.50. What is the percent discount?

$$\frac{35 - 12.50}{35} = \frac{22.5}{35}$$

$$= 0.642857143$$

$$64.29\%$$

A store marks all of their merchandise up by 240% before selling it. If they bought a turkey for \$8.50, how much will they sell it for?

$$\begin{array}{r} 100\% \\ +240\% \\ \hline 340\% \\ 340.0 \end{array}$$

$$\begin{array}{r} 3.4(8.50) \\ 28.9 \\ \hline \$28.90 \end{array}$$

David bought \$13,000 in Apple stock. Since he bought it, it has gone up by 3.88%. How much money is in his account now?

$$\begin{array}{r} 100\% \\ + 3.88\% \\ \hline 103.88\% \end{array}$$

$$1.0388(13000)$$
$$\$ 13504.40$$

Julie found a purse on sale for \$53. If the store is running a 45% off sale, what was the regular price of the purse?

$$\begin{array}{r} 100\% \\ - 45\% \\ \hline 55\% \end{array}$$

$$\begin{array}{r} 0.55x = 53 \\ \hline 0.55 \quad 0.55 \end{array}$$

$$x = 96.36 \quad \frac{55}{100} = \frac{53}{x}$$

$$\text{\$ } 96.36$$

A store is running a 20% off sale. What is the sale price of a drill that is regularly \$85?

$$0.8(85)$$
$$\text{\$ } 68$$

You went to the county fair guessed that the weight of a local cow was 2200 lb but the actual weight of the cow was 1850 lb. What was your percent error?

$$\frac{2200-1850}{1850} = \frac{350}{1850} = 0.189189189$$

$$18.92\%$$

Scott invested \$12,400 at 0.72% interest for 4 months. How much money did he make in interest?

0.72%

$$12400(0.0072)\left(\frac{4}{12}\right)$$

$$\$29.76$$

The population of a town has gone up by 14% over the last 20 years. If the population was 4327 20 years ago, what is the current population?

114%

$$1.14(4327) = 4932.78$$



4933 people

A few years ago, you bought some stock in a company. Since then, the value of the stock has gone down by 2.9%. If you currently have \$42,540 in your account, how much money did you invest?

Since it opened, a stock has gone down by 27%.
If it opened at \$19.63, what is the current price?

A restaurant marks up their wine by 170%. If they have a bottle of wine on the wine list for \$62, how much did they pay for it?

Stephen borrowed \$1960 at 5.5% simple interest. If he paid it back over the course of 2 months, how much money did he pay in interest?

Will marks up laptops 53% before he sells them. If he bought a laptop for \$360, how much will he sell it for?

The movie theatre nearby has a 15% off discount for students. If they normally charge \$12 for a ticket, how much should you expect to pay?

A sunglasses store buys Ray Bans for \$40 and sells them for \$180. What is their percent markup?

Kohls marks all of their merchandise up by 110% before selling it. If they are selling a pair of shoes for \$55, how much did they buy them for?

Walmart marks up their merchandise by 130% before they sell it. If they bought a TV for \$480, how much will they sell it for?

A printer is on sale for 40% off. If the regular price is \$350, what is the sale price?

Joan invested \$350 at 4.22% simple interest for 7 years. How much money does she make in interest?

