

1) What number is 130% of 40?

$$x = 1.3(40)$$

$$x = 1.3(40)$$

$$x = 52$$

$$\begin{array}{r} 1.3 \\ \times 40 \\ \hline 52.0 \end{array}$$

5) $3\frac{1}{2}\%$ of what number is 70?

$$\rightarrow 3.5\%$$

$$.035x = 70$$

$$\begin{array}{r} .035x = 70 \\ \hline .035 \quad .035 \end{array}$$

$$x = 2000$$

$$\begin{array}{r} 2000. \\ .035 \overline{) 700.00} \\ \underline{-70} \\ 0000 \end{array}$$

9) 24% of 35 is what number?

$$.24(35) = x$$

$$.24(35) = x$$

$$8.4 = x$$

$$\begin{array}{r} 24 \\ \times 35 \\ \hline 140 \\ 700 \\ \hline 840 \end{array}$$

2) 13% of what number is 1.56?

$$.13x = 1.56$$

$$\begin{array}{r} .13x = 1.56 \\ \hline .13 \quad .13 \end{array}$$

$$x = 12$$

$$\begin{array}{r} 12. \\ .13 \overline{) 1.56} \\ \underline{-13} \\ 26 \\ \underline{-26} \\ 0 \end{array}$$

6) How many trucks is 70% of 40 trucks?

$$x = .7(40)$$

$$x = .7(40)$$

$$x = 28 \text{ trucks}$$

$$\begin{array}{r} 40 \\ \times .7 \\ \hline 28.0 \end{array}$$

10) \$8 is $2\frac{1}{2}\%$ of what amount?

$$\rightarrow 2.5\%$$

$$8 = .025x$$

$$\begin{array}{r} 320. \\ .025 \overline{) 800.0} \\ \underline{-75} \\ 50 \\ \underline{-50} \\ 0 \end{array}$$

$$\begin{array}{r} 8 = .025x \\ \hline .025 \quad .025 \end{array}$$

$$\$320 = x$$

3) 30 is what percent of 25?

$$30 = x(25)$$

If you reduce $\frac{30}{25}$ to $\frac{6}{5}$ then divide, you get the same $1.2 = x$, so 120%.

$$\begin{array}{r} 30 = 25x \\ \hline 25 \quad 25 \end{array}$$

$$1.2 = x$$

$$120\%$$

$$\begin{array}{r} 1.2 \\ 25 \overline{) 30.0} \\ \underline{-25} \\ 50 \\ \underline{-50} \\ 0 \end{array}$$

7) 2.4 is 30% of what number?

$$2.4 = .3x$$

$$\begin{array}{r} 2.4 = .3x \\ \hline .3 \quad .3 \end{array}$$

$$8 = x$$

$$\begin{array}{r} 8. \\ .3 \overline{) 2.4} \\ \underline{-24} \\ 0 \end{array}$$

11) 48 tablets is what percent of 300 tablets?

$$48 = x(300)$$

Again, reducing $\frac{48}{300}$ to $\frac{4}{25}$ still yields 16%.

$$\begin{array}{r} .16 \\ 300 \overline{) 48.00} \\ \underline{-300} \\ 1800 \\ \underline{-1800} \\ 0 \end{array}$$

$$48 = 300x$$

$$.16 = x$$

$$16\%$$

4) 1.4% of \$60 is how much money?

$$.014(60) = x$$

$$.014(60) = x$$

$$.84 = x$$

$$\begin{array}{r} .014 \\ \times 60 \\ \hline .840 \end{array}$$

8) What percent of 8 cats is 20 cats?

$$x(8) = 20$$

If you reduce $\frac{20}{8}$ to $\frac{5}{2}$ then divide, you get the same $x = 2.5$, so 250%.

$$\begin{array}{r} 8x = 20 \\ \hline 8 \quad 8 \end{array}$$

$$x = 2.5$$

$$250\%$$

$$\begin{array}{r} 2.5 \\ 8 \overline{) 20.0} \\ \underline{-16} \\ 40 \\ \underline{-40} \\ 0 \end{array}$$

12) What is 17% of 80 people? (Round to the nearest number of people.)

$$x = .17(80)$$

$$x = 13.6$$

$$x \approx 14 \text{ people}$$

$$\begin{array}{r} .17 \\ \times 80 \\ \hline 13.60 \end{array}$$