

Solving Equations Using the Multiplication Principal of Equality

✓ ① $\frac{X}{5} = 35$ $\frac{\cancel{5}X}{\cancel{5}} = 35(\cancel{5})$ $\begin{array}{r} 35 \\ \times 5 \\ \hline 175 \end{array}$

$X = 175$

✓ ② $\frac{X}{6} = 30$ $\frac{\cancel{6}X}{\cancel{6}} = 30(\cancel{6})$ $X = 180$

✓ ③ $\frac{\cancel{-2}X}{\cancel{-2}} = \frac{10(\cancel{-2})}{\cancel{-2}}$ $X = -20$

✓ ④ $\frac{\cancel{5}15}{\cancel{5}} = \frac{a(\cancel{5})}{\cancel{5}}$ $\begin{array}{r} 15 \\ \times 5 \\ \hline 75 \end{array}$ $75 = a$

✓ ⑤ $\frac{\cancel{6}42}{\cancel{6}} = \frac{n(\cancel{6})}{\cancel{6}}$ $252 = n$ $\begin{array}{r} 42 \\ \times 6 \\ \hline 252 \end{array}$

✓ ⑥ $\frac{\cancel{4}\cancel{3}X}{\cancel{3}\cancel{4}} = \frac{15(\cancel{4})}{1(\cancel{3})}$ $\frac{\cancel{3}\cancel{5}\cancel{4}}{1\cancel{\cdot}3}$ $X = 20$ ✓

✓ ⑦ $\frac{\cancel{5}\cancel{1}a}{\cancel{1}\cancel{5}} = \frac{4(\cancel{5})}{1(\cancel{1})}$ $a = 20$ ✓

✓ ⑧ $\frac{\cancel{7}\cancel{3}a}{\cancel{3}\cancel{7}} = \frac{12(\cancel{7})}{1(\cancel{3})}$ $a = 28$ ✓ $\frac{4\cancel{\cdot}3\cancel{\cdot}7}{\cancel{3}} = 28$

✓ ⑨ $\frac{\cancel{4}\cancel{1}a}{\cancel{1}\cancel{4}} = \frac{2(\cancel{4})}{3(\cancel{1})} = \frac{8}{3}$ $a = \frac{8}{3}$ ✓

✓ ⑩ $\frac{\cancel{3}\cancel{4}}{\cancel{1}\cancel{5}} = \frac{\cancel{1}y(\cancel{3})}{\cancel{3}\cancel{1}}$ $\frac{12}{5} = y$