

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

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

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

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