

ALL PROBLEMS CAN BE COMPLETED ON THIS WORKSHEET

**WS 24.1 - Equations & Ordered Pairs**Complete each ordered pair so that it is a solution to  $3x + y = 20$ .

$$\begin{array}{l}
 1. \left( \frac{2}{x}, \frac{14}{y} \right) \quad 3x + y = 20 \\
 \quad \quad \quad 3(2) + y = 20 \\
 \quad \quad \quad 6 + y = 20 \\
 \quad \quad \quad \quad -6 \quad \quad -6 \\
 \quad \quad \quad \quad \quad \quad y = 14
 \end{array}$$

$$\begin{array}{l}
 2. \left( \frac{5}{x}, 5 \right) \quad 3x + y = 20 \\
 \quad \quad \quad 3x + (5) = 20 \\
 \quad \quad \quad 3x + 5 = 20 \\
 \quad \quad \quad \quad -5 \quad \quad -5 \\
 \quad \quad \quad \quad \quad \quad \frac{3x}{3} = \frac{15}{3} \\
 \quad \quad \quad \quad \quad \quad \underline{x = 5}
 \end{array}$$

Complete each ordered pair so that it is a solution to  $2x + y = 32$ .

$$\begin{array}{l}
 3. \left( \frac{15}{x}, 2 \right) \quad 2x + y = 32 \\
 \quad \quad \quad 2x + (2) = 32 \\
 \quad \quad \quad 2x + 2 = 32 \\
 \quad \quad \quad \quad -2 \quad \quad -2 \\
 \quad \quad \quad \quad \quad \quad \frac{2x}{2} = \frac{30}{2} \\
 \quad \quad \quad \quad \quad \quad \underline{x = 15}
 \end{array}$$

$$\begin{array}{l}
 4. \left( 12, \frac{8}{y} \right) \quad 2x + y = 32 \\
 \quad \quad \quad 2(12) + y = 32 \\
 \quad \quad \quad 24 + y = 32 \\
 \quad \quad \quad \quad -24 \quad \quad -24 \\
 \quad \quad \quad \quad \quad \quad \underline{y = 8}
 \end{array}$$

Complete each ordered pair so that it is a solution to  $5x - y = 12$ .

$$\begin{array}{l}
 5. \left( 20, \frac{88}{y} \right) \quad 5x - y = 12 \\
 \quad \quad \quad 5(20) - y = 12 \\
 \quad \quad \quad 100 - y = 12 \\
 \quad \quad \quad \quad -100 \quad \quad -100 \\
 \quad \quad \quad \quad \quad \quad \frac{-1y}{-1} = \frac{-88}{-1} \\
 \quad \quad \quad \quad \quad \quad \underline{y = 88}
 \end{array}$$

$$\begin{array}{l}
 6. \left( \frac{1}{x}, -7 \right) \quad 5x - y = 12 \\
 \quad \quad \quad 5x - (-7) = 12 \\
 \quad \quad \quad 5x + 7 = 12 \\
 \quad \quad \quad \quad -7 \quad \quad -7 \\
 \quad \quad \quad \quad \quad \quad \frac{5x}{5} = \frac{5}{5} \\
 \quad \quad \quad \quad \quad \quad \underline{x = 1}
 \end{array}$$