

Solve using Elimination: Shown below is only one of the many ways to solve this system using Elimination.

$$\begin{array}{rcl}
 5. \quad 28\left(y = \frac{1}{2}x - 4\right) & \rightarrow & 28y = 14x - 112 \rightarrow -14x + 28y = -112 \\
 14x + 7y = 7 & \xrightarrow{+} & 14x + 7y = 7 \\
 \hline & & 35y = -105 \\
 & & \frac{35}{35} \quad \frac{-105}{35}
 \end{array}$$

sol: (2, -3)

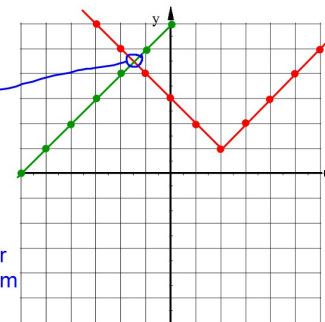
$$\begin{array}{l}
 y = -3 \\
 14x + 7(-3) = 7 \\
 14x - 21 = 7 \\
 \quad +21 \quad +21 \\
 \hline
 14x = 28 \\
 \frac{14}{14} \quad \frac{28}{14} \\
 x = 2
 \end{array}$$

Solve this system of equations. State your answers as ordered pairs.

$$y = |x - 2| + 1$$

$$y = x + 6$$

Since the solution would have to be estimated it's better to solve this problem using Algebra. See the next page.



Solve this system of equations. State your answers as ordered pairs.

Using Substitution you create this equation:

$$|x - 2| + 1 = x + 6$$

$$|x - 2| = x + 5$$

$$y = |x - 2| + 1$$

$$y = x + 6$$

$$\begin{array}{l}
 y = -\frac{3}{2} + 6 \\
 y = \frac{9}{2}
 \end{array}$$

$$\begin{array}{l}
 x - 2 = -(x + 5) \\
 x - 2 = -x - 5 \\
 2x = -3 \\
 x = -\frac{3}{2}
 \end{array}$$

$$\begin{array}{l}
 x - 2 = x + 5 \\
 -2 = 5
 \end{array}$$

since this is NOT true  
there is no solution  
from this part of  
the problem.

$$\left(-\frac{3}{2}, \frac{9}{2}\right) \rightarrow (-1.5, 4.5)$$