Direct Variation

Tell whether each equation represents a direct variation. If so, identify the constant of variation.

1. \( y = 1.5x \)  
2. \( y = \frac{4}{8}x \)  
3. \( y = 9x + 0.5 \)  
4. \( 12y = 3x \)  
5. \( 4y = x - \frac{1}{5} \)  
6. \( 0.8y = x \)  

Tell whether each set of data represents a direct variation. If so, identify the constant of variation and then write the direct variation equation.

7.  
\[
\begin{array}{ccc}
  x & 4 & 8 & 12 \\
  y & -4 & -1 & 2 \\
\end{array}
\]

8.  
\[
\begin{array}{ccc}
  \text{Weight (oz)} & 0.5 & 1.5 & 2.5 \\
  \text{Price ($)} & 0.4 & 1.2 & 2 \\
\end{array}
\]

9.  
\[
\begin{array}{ccc}
  x & 2 & 2.5 & 4 \\
  y & 3 & 7 & 12 \\
\end{array}
\]

10.  
\[
\begin{array}{ccc}
  x & 1 & 5 & 10 \\
  y & \frac{1}{3} & \frac{1}{3} & \frac{2}{3} \\
\end{array}
\]

Tell whether each graph represents a direct variation. If so, identify the constant of variation and write the equation.

11.  

12.  