## LT 3.6 Skills Practice <br> Solving Quadratic Equations by Factoring

Solve the following quadratic equations by factoring.

1. $3 x^{2}-12=0$

$$
3\left(x^{2}-4\right)=0
$$

$$
3(x-2)(x+2)=0
$$

$$
x=2,-2
$$

$$
\text { 3. } 9 x^{2}-25=0
$$ $\mathrm{x}=-5 / 3,5 / 3$

5. $12 x^{2}-108 x=0$

$$
\mathbf{x}=\mathbf{0}, \quad 9
$$

$$
x=11,-11
$$

Solve each equation by factoring.
6. $64 x^{2}+112 x+49=0$

$$
\mathrm{x}=-7 / 8, \quad-7 / 8
$$

7. $289 x^{2}+34 x+1=0$

$$
\mathbf{x}=-1 / 17, \quad-1 / 17
$$

$$
\begin{array}{r}
8.121 x^{2}-88 x+160=0 \\
x=4 / 11,4 / 11
\end{array}
$$

9. $x^{2}-20 x+100=0$

$$
\mathrm{x}=10,10
$$

