Name: _____ Hour: _____

Solve each equation by factoring.

1.
$$5x^2 + 15 = -20x$$

2.
$$0 = -336 - 90m - 6m^2$$

3.
$$-32 = -5p^2 + 36p$$

4.
$$3m^2 = 11m - 10$$

Solve each equation by taking square roots. Leave answers in radical form, NO DECIMALS!!

5.
$$5x^2 = 5$$

6.
$$n^2 + 3 = -20$$

7.
$$3n^2 + 8 = 251$$

8.
$$8b^2 + 2 = 762$$

9.
$$(\mathbf{x} - 4)^2 = 25$$

$$\mathbf{10.}\ 5(\mathbf{x}+7)^2=5$$

$$_{11.}\,3(\mathbf{x}-2)^2=36$$

$$12. \left(x - \frac{1}{2}\right)^2 = 1$$

$$\mathbf{13.} \left(\mathbf{x} - \frac{3}{2} \right)^2 = \frac{7}{4}$$

$$\mathbf{14.} \left(\mathbf{x} + \frac{5}{2} \right)^2 = \frac{15}{4}$$