Name: _____ Block: _____

Pre-Calculus 11: Solving Quadratics Quiz #1

Full credit will only be awarded for all work shown in a neat and organized manner.

1. Find a quadratic equation in general form ($ax^2 + bx + c = 0$) that has solutions $x = -3$ and $x = \frac{2}{5}$.

2. Solve each quadratic equation by factoring (No completing the square allowed!)
   Don't forget to check your answers

   a. $(x + 5)(x - 2) = 18$

   b. $\frac{1}{2}p^2 - 4p = 3p$

   c. $6z^2 + z - 1 = 6z + 3$

   d. $\frac{3}{x-5} + 2 = \frac{15}{x^2 - 5x}$

3. Solve each quadratic equation by completing the square. (No factoring allowed!) *Answer exactly*

a. $3x^2 - 4x = 2x^2 + 9$

b. $9t^2 + 12t + 4 = 0$

c. $\frac{1}{2}m(10 - m) = 20$