

Name: _____

M\$3A Homework 40

1. Solve by completing the square: $2x^2 + 8x + 3 = 0$

3. Solve by completing the square: $6r^2 = 5r + 2$

2. Solve by completing the square: $2x^2 - 20x = 5$

4. Solve by completing the square: $3x^2 + 5 = 12x$

5. Rosie ran to the park at 7 miles per hour and walked back home at 3 miles per hour. How far was it to the park if the round trip took 20 hours?

6. If the length of a rectangle is represented by $\frac{x^2 - 5x - 14}{2x^2 + 5x + 2}$ while the width of the rectangle is represented by $\frac{2x^2 + 9x + 4}{x^2 - 7x}$, express the area of the rectangle in simplest form.

7. A rectangular garden is surrounded by a stone walkway of uniform width. The area of the garden is 180 square yards. If the dimensions of the garden including the walkway are 16 yards by 24 yard, find the dimensions of the garden.