

Name _____

9-5A Lesson Master**Questions on SPUR Objectives**

See pages 576–579 for objectives.

SKILLS Objective B1. *Multiple Choice.* Which formula could be used to solve $x^2 - 5x = 3$? _____

A $x = \frac{-5 \pm \sqrt{(-5)^2 - 4(1)(-3)}}{2(1)}$

B $x = \frac{-5 \pm \sqrt{(-5)^2 - 4(1)(3)}}{2(1)}$

C $x = \frac{5 \pm \sqrt{(-5)^2 - 4(1)(-3)}}{2(1)}$

D $x = \frac{5 \pm \sqrt{(-5)^2 - 4(1)(3)}}{2(1)}$

In 2 and 3, find the exact solutions using the Quadratic Formula.

2. $3x^2 + 7x - 4 = 0$ _____

3. $6m + 10 = m^2$ _____

In 4–7, solve using the Quadratic Formula. Round answers to the nearest hundredth.

4. $7n^2 - 12 = -9n$ _____

5. $y^2 + 11y + 18 = 0$ _____

6. $4(t^2 - 2t) = 13$ _____

7. $12 - x^2 = 7$ _____

8. Jordan and Ava both tried to solve $6x^2 = 28 - 13x$ using the Quadratic Formula on a math test.**Jordan's work****Ava's work**

Step 1: $6x^2 + 13x - 28 = 0$

Step 1: $6x^2 + 13x - 28 = 0$

Step 2: $x = \frac{-13 \pm \sqrt{13^2 - 4(6)(-28)}}{2(6)}$

Step 2: $x = \frac{-13 \pm \sqrt{13^2 - 4(6)(-28)}}{2(6)}$

Step 3: $x = \frac{-13 \pm \sqrt{169 - 672}}{12}$

Step 3: $x = \frac{-13 \pm \sqrt{169 + 672}}{12}$

Step 4: $x = \frac{-13 \pm \sqrt{-503}}{12}$

Step 4: $x = \frac{-13 \pm \sqrt{841}}{12}$

Step 5: Not possible

Step 5: $x = \frac{4}{3}$ or $x = -3.5$

a. Which student made a mistake in solving the equation? _____

b. At what step did the student make the mistake? _____