

Must show all steps and all work to earn full credit.

Solve the equation.

$$1) \frac{2}{2x} - \frac{3}{x+1} = 1$$

Use the quadratic formula to solve the equation.

$$2) 2x^2 = -5x - 7$$

- 3) A 10 foot ladder is leaning against a vertical wall so that the distance from its base to the wall is 1 foot less than the distance from its top to the floor. How far away from the wall is the base of the ladder? Round to the nearest hundredth of a foot.

Solve the problem. (Write your answers in simplest radical form)

- 4) The length of a rectangle is 2 inches more than its width. If the area is 50 square inches, what are the length and width?

Solve the problem. Round your answer to the nearest tenth, if necessary.

- 5) The length of a rectangular flower bed is 2 feet longer than the width. If the area is 6 square feet, then what are the exact length and width?