Find the solutions to this quadratic equation using the Quadratic Formula. Round to the nearest hundredth as necessary.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$6x^2 + 7x - 20 = 0$$

1st: Find
$$b^2 - 4ac = 529$$

2nd: Rewrite the Quadratic Formula
Using this value in place of
b² - 4ac and replace 2a with its value

$$\frac{-7 \pm \sqrt{529}}{12}$$

 $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

3rd: Calculate the two answers

Find the EXACT Solutions.

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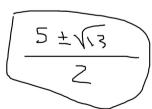
3rd: Calculate the two answers

$$\frac{-7 \pm \sqrt{529}}{12} = \frac{-7 \pm 23}{12} = \frac{16}{12}, \frac{-7 - 13}{12} = \frac{4}{3}, \frac{-5}{2}$$

Find the EXACT Solutions.

$$x^2 - 5x + 3 = 0$$

$$b^2 - 4ac = 3$$



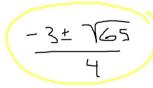
Since 13 is not a perfect square and the radical can't be simplified this is all you can do without rounding to get an answer.

Find both the Exact solutions and solutions rounded to the nearest hundredth.

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

$$2x^2 + 3x - 7 = 0$$

$$b^2 - 4ac = 65$$



Exact Solutions

Solutions rounded

277 -2.77 to nearest hundredth.

Simplify each radical.

1.
$$\sqrt{75} = \sqrt{25.3}$$

$$= 5\sqrt{3}$$

3.
$$\sqrt{108} = \sqrt{36.3} \quad 4$$

Simplify each radical.

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$$\sqrt{75} = \sqrt{25^{\circ}3}$$

$$= |5 \sqrt{3}|$$

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3.
$$\sqrt{108} = \sqrt{36 \cdot 3}$$
4.
$$\sqrt{486}$$

$$\sqrt{486}$$