Find all real and imaginary solutions by using the quadratic formula: $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

Round real answers to the nearest hundredth and simplify imaginary answers.

$$\frac{8 \pm \sqrt{344}}{14}$$

$$7x^2 - 8x - 10 = 0$$

Solutions are: $x = -0.75, 1.90$

Find all real and imaginary solutions by factoring.

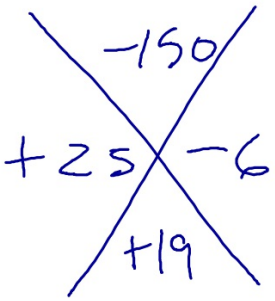
$$3x^5 + 57x^3 - 450x = 0$$

$3x(x^4 + 19x^2 - 150)$

$3x(x^2 + 25)(x^2 - 6)$

Now find the zeros of each factor

, Solutions are: $\pm\sqrt{6}, 0, \pm 5i$



$3x = 0$

$x = 0$

$x^2 - 6 = 0$

$\sqrt{x^2} = \sqrt{6}$

$x = \pm\sqrt{6}$

$x^2 + 25 = 0$

$\sqrt{x^2} = \sqrt{-25}$

$x = \pm 5i$