Bellwork Alg 2 Tuesday, November 19, 2019

1. Solve this Quadratic Equation by graphing. Round to the nearest hundredth.

$4x^2 + 23x = 21$

2. Solve this Quadratic Equation by factoring.

$2x^2 - 13x = 24$

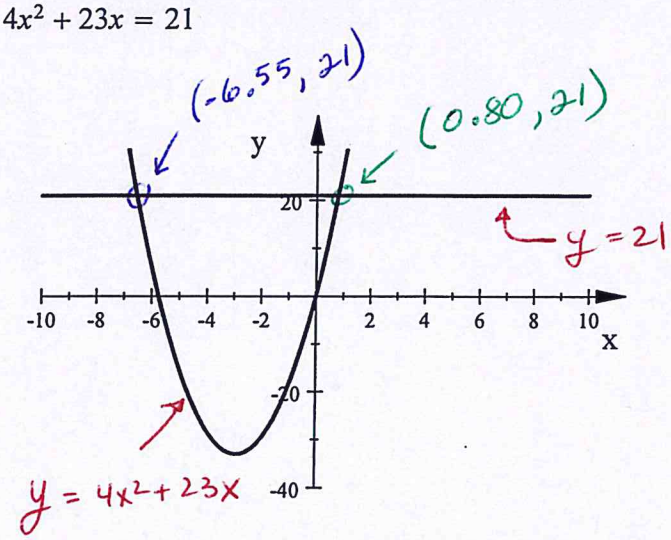
3. Solve this Quadratic Equation using the Quadratic Formula. $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$3x^2 + 8x - 13 = 0$

Bellwork Alg 2 Tuesday, November 19, 2019 ANSWERS

1. Solve this Quadratic Equation by graphing. Round to the nearest hundredth.

$4x^2 + 23x = 21$



Solutions are $x = -6.55, 0.80$

2. Solve this Quadratic Equation by factoring.

$2x^2 - 13x = 24$

$-24 \quad -24$

$2x^2 - 13x - 24 = 0$

NO GCF

-48, -16, $+3$, -13 $\Rightarrow$

	x	-8
2x	$2x^2$	-16x
+3	3x	-24

$(x-8)(2x+3)=0$

$x = -3/2, 8$

3. Solve this Quadratic Equation using the Quadratic Formula. $x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

$3x^2 + 8x - 13 = 0$

$a = 3$
$b = 8$
$c = -13$

$b^2 - 4ac = 8^2 - 4(3)(-13) = 220$

$x = \dfrac{-8 \pm \sqrt{220}}{6} = 1.14, -3.81$