

11/16/18

1. Solve for x

$$x^2 + 4x - 21 = 0$$

$$\Rightarrow (x+7)(x-3) = 0$$

$$\Rightarrow x+7=0 \quad \text{or} \quad x-3=0$$

$$\Rightarrow x=-7 \quad \text{or} \quad x=3$$

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

$\Rightarrow$  Quadratic Formula:  $\frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$

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

$$\Rightarrow \frac{-3 \pm \sqrt{17}}{2} = x$$

Discriminant = 17

38% of what number is

38% of 150 is what number?

$$\Rightarrow \frac{x}{150} = \frac{38}{100}$$

$$\Rightarrow x = 57$$

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125% of what number is 60?

$$\Rightarrow \frac{60}{x} = \frac{125}{100}$$

$$\Rightarrow x = 48$$

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0.459 of what percent is 27?

$$\Rightarrow \frac{0.459}{27} = \frac{x}{100}$$

$$\Rightarrow x = 17\%$$