Algebra 1 Bellwork Monday, May 4, 2015

Find the solution to each equation, which has already been factored for you.

1. $0 = (7x - 9)(x + 3)$
2. $0 = 2x(x + 6)(3x + 11)$
3. $0 = 8(4x - 5)(5x + 6)$

Solve each quadratic equation by factoring.

Remember to follow these steps:

a. Rewrite equation so that is has this form: $ax^2 + bx + c = 0$

b. Factor.

c. Find the zeros of each factor.

4. $16x^2 + 36x - 10 = 0$
5. $3x^3 - 2x^2 + 32 = 48x$
6. $32x^2 - 162 = 0$
7. $18x^2 + 24x = 0$

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ANSWERS

Find the solution to each equation, which has already been factored for you.

1. $0 = (7x - 9)(x + 3)$

$X = \frac{9}{7}, -3$

2. $0 = 2x(x + 6)(3x + 11)$

$X = 0, -6, -11/3$

3. $0 = 8(4x - 5)(5x + 6)$

$X = 5/4, -6/5$

Solve each quadratic equation by factoring.

Remember to follow these steps:

a. Rewrite equation so that is has this form: $ax^2 + bx + c = 0$

b. Factor.

c. Find the zeros of each factor.

4. $16x^2 + 36x - 10 = 0$

$2(8x^2 + 18x - 5) = 0$

$2(4x - 1)(2x + 5) = 0$

$X = 1/4, -5/2$

5. $3x^3 - 2x^2 + 32 = 48x$ $\rightarrow$ $3x^3 - 2x^2 - 48x + 32 = 0$

$(x^2 - 16)(3x - 2) = 0$

$(x \pm 4)(3x - 2) = 0$

$X = \pm 4, 2/3$

	$3x$	-2
x^2	$3x^3$	$-2x^2$
-16	$-48x$	$+32$

6. $32x^2 - 162 = 0$

$2(16x^2 - 81) = 0$

$2(4x \pm 9) = 0$

$X = \pm 9/4$

7. $18x^2 + 24x = 0$

$6x(3x + 4) = 0$

$X = 0, -4/3$