Unit 7 Review (A.REI.4)

Approaching

1) Determine the values of *a*, *b*, and *c* for each quadratic equation.

Equation	a	b	c
$y = -9x^2 - 4 + 11x$			
$y = -5x + 6x^2 - 12$			
$y = -1 - x^2 + 10x$			

2) Solve using square roots: $x^2 = 144$

Meeting

3) Ashleigh determines the roots for the quadratic equation $2x^2 + 3x - 9 = -10$. Her work is shown.

$2x^2 + 3x - 9 = -10$

$a = 2, b = 3, c = 1$

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

$x = \frac{3 \pm \sqrt{9 - 8}}{4}$

$x = \frac{3 \pm \sqrt{1}}{4}$

$x = \frac{(3 \pm 1)}{4}$

$x = 1$ or 0.5

The roots are approximately 1 and 0.5.

a) What did Ashleigh do incorrectly?

b) Determine the roots for the given quadratic equation using the Quadratic Formula. Show your work.

Unit 7 Review (A.REI.4), page 2

4) Solve by factoring.

a) $x^2 - 8x - 48 = 0$

b) $x^2 - 14x + 40 = 0$

Exemplary

5) Determine the roots of the equation $x^2 - 10x - 22 = 2$ by completing the square.