5-6 The Quadratic Formula

✓ Lesson Quiz

Find the zeros of each function by using the Quadratic Formula.

1. $f(x) = 3x^2 - 6x - 5$

2. $g(x) = 2x^2 - 6x + 5$

Find the type and number of solutions for each equation.

3. $x^2 - 14x + 50 = 0$

4. $x^2 - 14x + 48 = 0$

5. A pebble is tossed from the top of a cliff. The pebble's height in feet is given by $y(t) = -16t^2 + 6t + 200$, where t is the time in seconds. Its horizontal distance in feet from the base of the cliff is given by $d(t) = 5t$. How far will the pebble be from the base of the cliff when it hits the ground?

Holt Algebra 2

5-6 The Quadratic Formula

✓ Lesson Quiz

Find the zeros of each function by using the Quadratic Formula.

1. $f(x) = 3x^2 - 6x - 5$ $1 \pm \dfrac{2\sqrt{6}}{3}$

2. $g(x) = 2x^2 - 6x + 5$ $\dfrac{3}{2} \pm \dfrac{1}{2}i$

Find the type and number of solutions for each equation.

3. $x^2 - 14x + 50 = 0$ **2 distinct nonreal complex**

4. $x^2 - 14x + 48 = 0$ **2 distinct real**

5. A pebble is tossed from the top of a cliff. The pebble's height in feet is given by $y(t) = -16t^2 + 6t + 200$, where t is the time in seconds. Its horizontal distance in feet from the base of the cliff is given by $d(t) = 5t$. How far will the pebble be from the base of the cliff when it hits the ground? **about 19 ft**

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