

TRI FACTORING AGAIN

Factoring Quadratics

Factor each of the following expressions.

1) $8x^2 + 30x + 7$

2) $12m^2 - 26m - 10$

3) $-8k^2 + 10k$

4) $5w^2 - 13w + 6$

Solving Quadratics

Solve each of the following quadratic equations.

5) $-12n^2 + n + 20 = 0$

6) $8x^2 + 5x - 4 = 2x^2 - 8x + 1$

7) A rocket scientist presses the button to launch the rocket but the button malfunctions. So, 2 seconds later the rocket launches. The path of the rocket can be modeled by the equation $h(t) = -12t^2 + 74t - 100$. Use the equation to determine how long after the button was pressed the rocket lands on the ground.

8) A skydiver jumps from an altitude of 10,000 feet. Ignoring air resistance, the distance above the ground, d , of the skydiver can be modeled by $d(t) = -16t^2 + 10000$, where t is time measured in seconds. How long will it take for the skydiver to be 3,600 feet away from the ground?