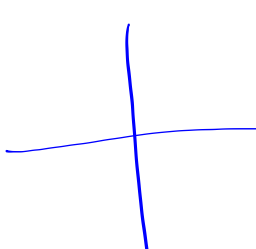


Warm-up: Determine the roots of the following quadratic equation:

1) $y = 2x^2 + 8x - 24$
 $y = 2(x^2 + 4x - 12)$
 $y = 2(x-2)(x+6)$
 $0 = 2(x-2)(x+6)$
 $\frac{0}{2} = \frac{2(x-2)(x+6)}{2}$
 $0 = (x-2)(x+6)$
 $0 = x-2 \quad 0 = x+6$
 $x=2 \quad x=-6$

2) $y + 5 = 3x^2 - 2x - 5$
 $y = 3x^2 - 2x - 10$
 $y = (x-5)(x+3)$
 $y = (x - \frac{5}{3})(x+1)$
 $y = (3x-5)(x+1)$
 $0 = 3x-5 \quad 0 = x+1$
 $x = \frac{5}{3} \quad x = -1$



Oct 10-8:06 PM

$y = 3x^2 - 2x - 5$

$y = (3x^2 + 3x)(-5x - 5) - 5 + 3$

$y = 3x(x+1) - 5(x+1)$

$y = (x+1)(3x-5)$

Oct 27-9:39 AM

Oct. 28, 2013

Graphing Calculator Example Oct. 27, 2017

Natasha got her license (Not sure how). She hit a pylon and sent it in a parabolic path defined by

$$h = -4.9t^2 + 19.6t, \quad t = \text{time (seconds)}$$

$$h = \text{height (meters)}$$

a) What is the maximum height reached by the pylon?

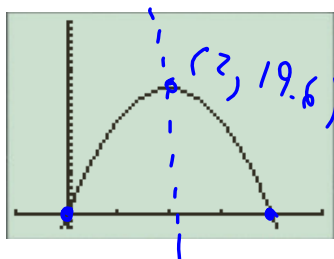
19.6m

b) What time did it reach the maximum?

2 sec

c) When did it hit the ground?

4 sec



Apr 12-12:21 PM

Attachments

7s4e1 final.mp4

7s4e2 final.mp4

7s4e3 final.mp4

7s4e4 final.mp4

fm7s4-p11.tns

FM11-7s4.gsp