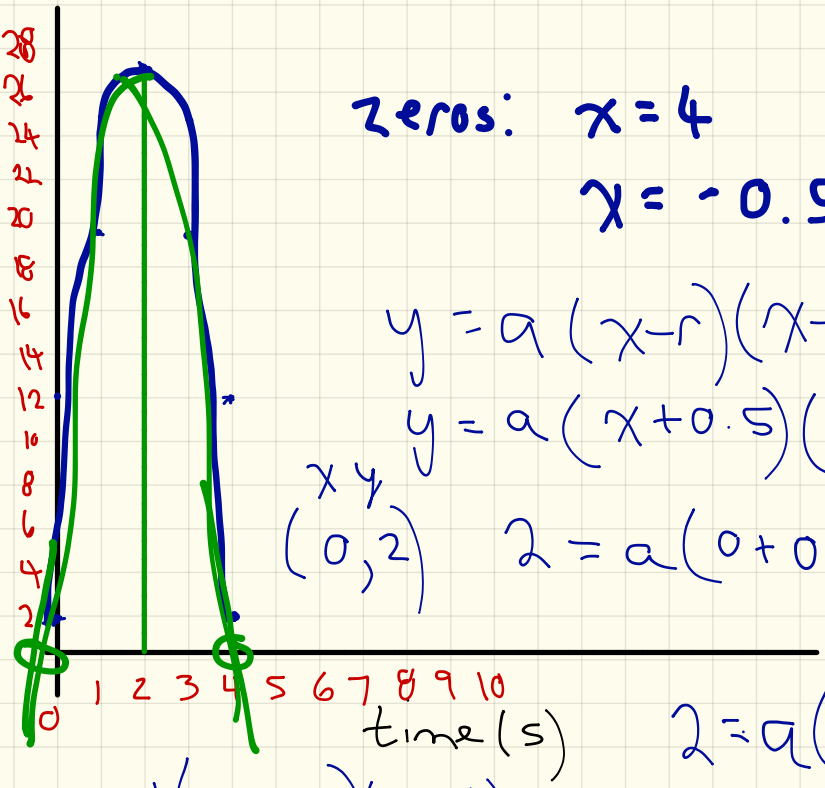
Reinforcement

- Pages 176 – 178
  - #6, 9, 11, 13

#9, #11

Pg. 177 #9.



zeros: $x = 4$

$x = -0.5$

$y = a(x-r)(x-s)$

$y = a(x+0.5)(x-4)$

x y

$(0, 2)$ $\quad 2 = a(0+0.5)(0-4)$

$2 = a(0.5)(-4)$

$2 = a(-2)$

$2 = -2a$

$a = -2/2$

$a = -1$

$y = -1(x+0.5)(x-4)$

b) $x = 3.8$

$y = -1(3.8+0.5)(3.8-4)$

$y = -1(4.3)(-0.2)$

$y = 0.86$

Zeros $x = -0.5$
$x = 4$

A.O.S.

$$x = \frac{-0.5 + 4}{2}$$

$$x = \frac{3.5}{2}$$

$$x = 1.75$$

$$y = -1(x + 0.5)(x - 4)$$

$$y = -1(1.75 + 0.5)(1.75 - 4)$$

$$y = -1(2.25)(-2.25)$$

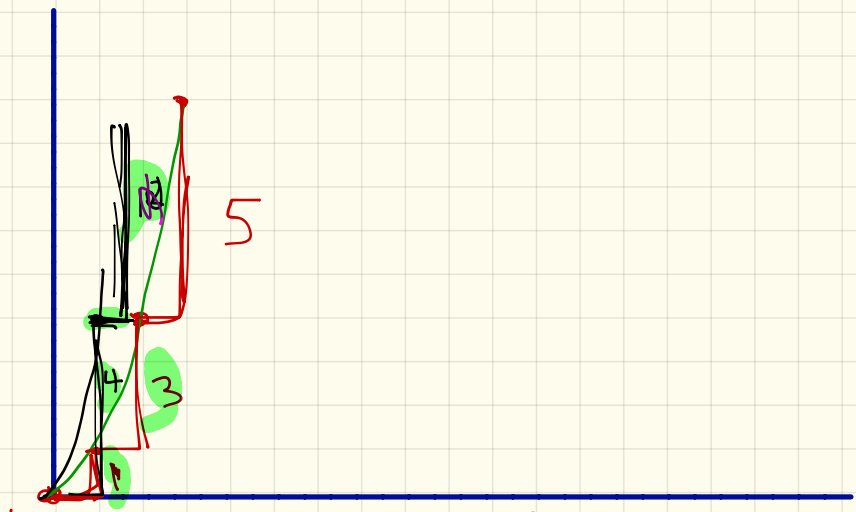
$$y = 5.06$$

∴ Max height 5.06 m

Vertex $(1.75, 5.06)$

Pg. 178 #11

Diagram	# dots	
0	0	4 > 8
1	4	
2	16	12 > 8
3	36	20



$\frac{4}{1} = 4$

$y = x^2$

$a = 1$

$\frac{12}{3} = 4$

$20/5 = 4$

Diagram 20

$y = 4x^2$

$y = 4x^2$

$y = 4(20)^2$

$y = 1600$

$x = 0$	$y = 0$
$x = 1$	$y = 4$
$x = 2$	$y = 16$
$x = 3$	$y = 36$