Assigned Work:

p.294 #11, 13, 16, 20*
p.302 # 9, 12, 13, 16*

11. $R = (5)(300)$

$R = (5+0.50)(300-30)$

$R = (5+2(0.50))(300-2(30))$

$R = (5+0.50x)(300-30x)$

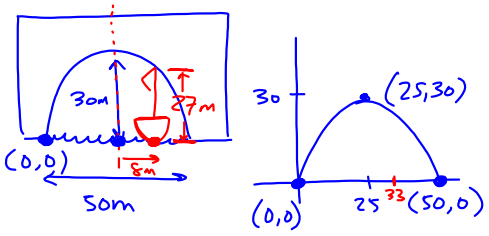
① zeroes

② mp zeroes → x_v

③ y_v

Apr 15-12:08 PM

p.294 #16.



zeroes: 0, 50

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

$y = a(x)(x-50)$

sub V(25,30)

$30 = a(25)(25-50)$

$30 = a(25)(-25)$

$30 = -625a$

$\frac{30}{-625} = \frac{-625a}{-625}$

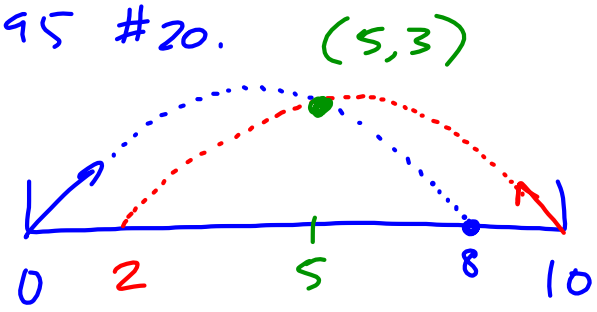
$a = \frac{-30}{625} = \frac{-6}{125}$

$y = \frac{-6}{125}x(x-50)$

How high is the bridge at $x = 33$?

Apr 21-1:56 PM

p. 295 #20.



$y = a(x-5)(x-t)$

$y = ax(x-8)$

Sub (5,3) to find a

Apr 21-2:03 PM

p. 302 #12.

$h = -5t^2 + 9t + 1$

$h = -t(5t-9) + 1$

$= 0$

$t = 0$ $\quad 5t - 9 = 0$

$5t = 9$

$t = \frac{9}{5}$

$= 1.8$

$x_v = \frac{0 + 1.8}{2}$

$= 0.9$

$y = a(x-0.9)^2 + k$

$y = -5(x-0.9)^2 + k$

Sub (0,1)

$1 = -5(0-0.9)^2 + k$

$k =$ _____

≤ 9

P-S

I ✗

(0,1)

(t,1)

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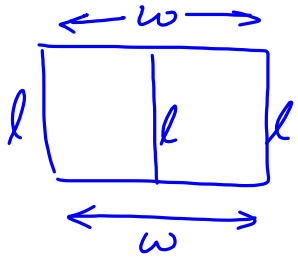
16.



$\frac{\$3000}{\$5/m} = 600m$

$A = lw$

$A = l(300 - \frac{3}{2}l)$

$3l + 2w = 600$

$2w = 600 - 3l$

$w = 300 - \frac{3}{2}l$

① Set $A = 0$

② find zeroes

③ A of S, x_v

④ sub $x_v \rightarrow y_v$

Apr 21-2:15 PM