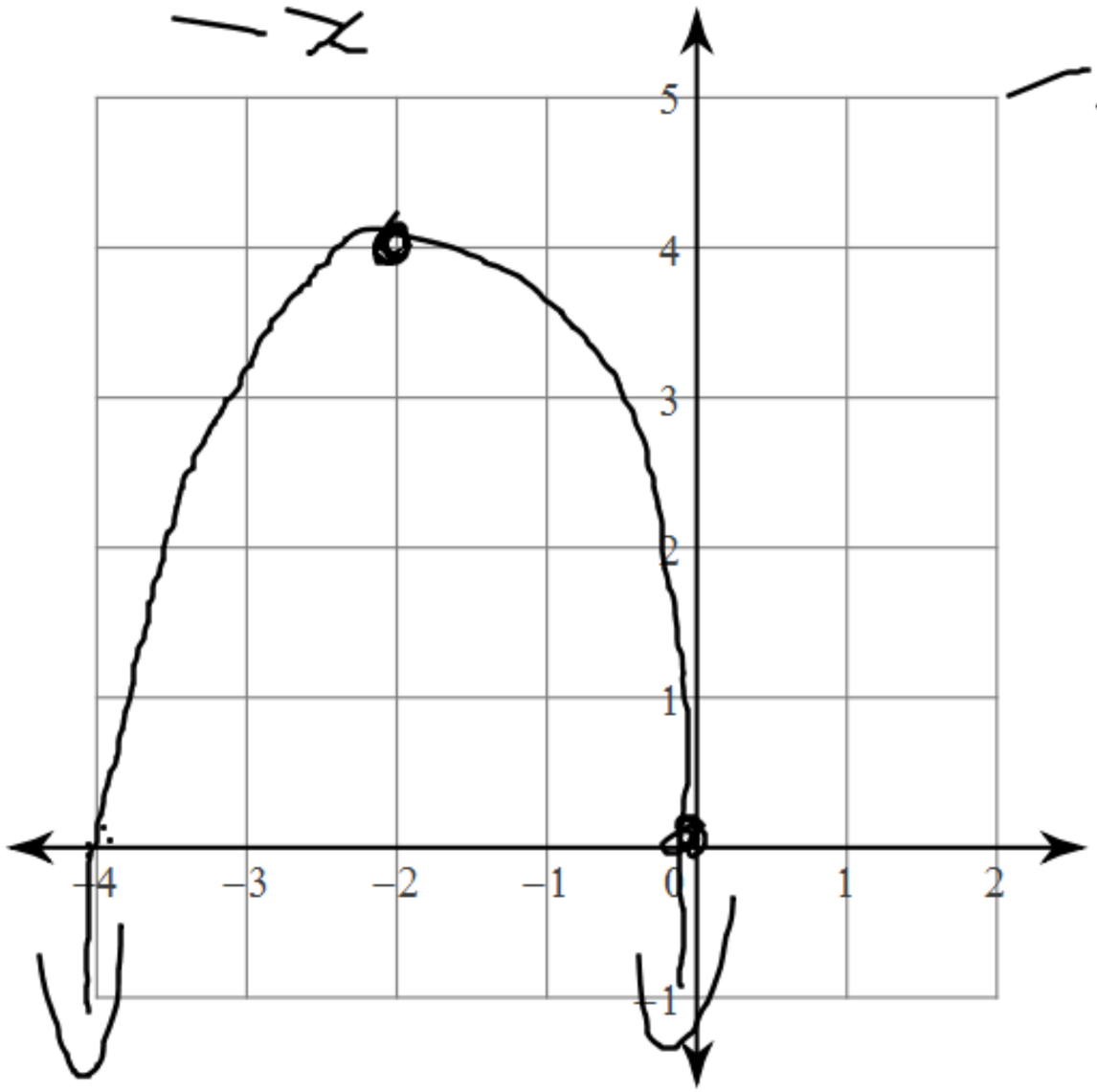
Sketch the graph of each function.

7) $y = -x^2 - 4x$



$-x(x+4)$

$x=0 \quad x=-4$

$y=(0)^2-4(0)$

$y=0$

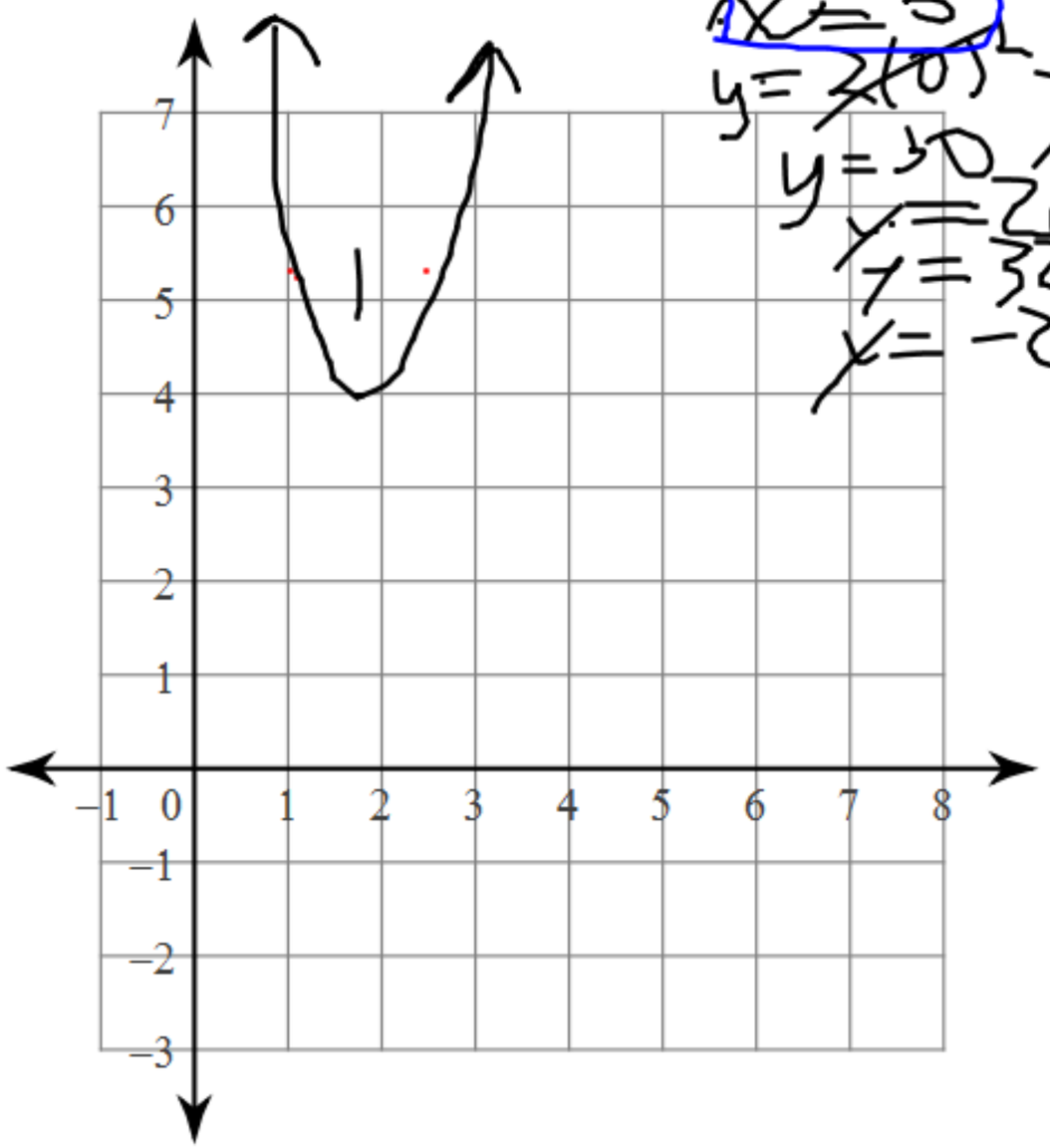
$y=-(-4)^2-4(-4)$

$y=-4+8$

$y=4$

Sketch the graph of each function.

8) $y = 2x^2 - 16x + 30$



$y = 2(x^2 - 8x + 15)$

$\times 15 \quad +-8$

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

$x-5=0 \quad x-3=0$

$x=5 \quad x=3$

$(5,0) \quad (3,0)$

$y = 2(0)^2 - 16(0) + 30$

$y = 30$

$y = 2(4)^2 - 16(4) + 30$

$y = 32 - 64 + 30$

$y = -2$

Section 5.5

zeroes

#1a) $-2, 3$

#13 $y = (x-1)(x+2)$

$+1 \quad +1 \qquad -2 \quad -2$

$x - 1 = 0 \qquad x + 2 = 0$

$x = 1 \qquad x = -2$

$S = \{1, -2\}$

#4 a) $x^2 + 8x + 15$

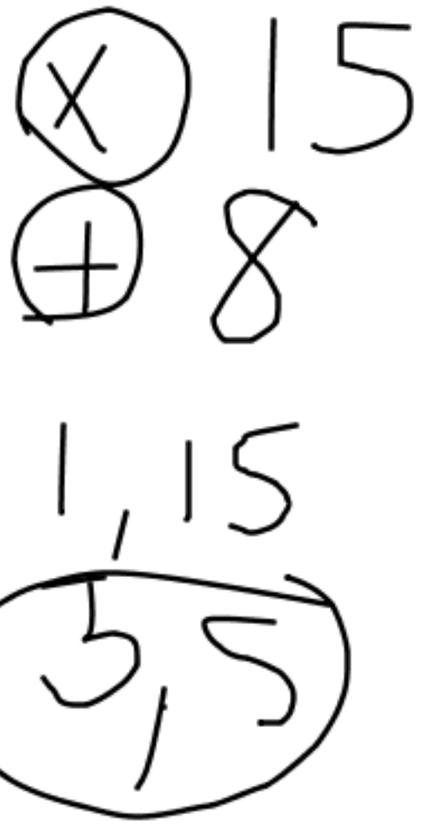
$(x+3)(x+5)$

$x+3=0$ $\quad$ $x+5=0$

$-3 \quad -3$ $\quad$ -5

$x=-3$ $\quad$ $x=-5$

$SS = \{-3, -5\}$



Homework

#1-5, b is DONE