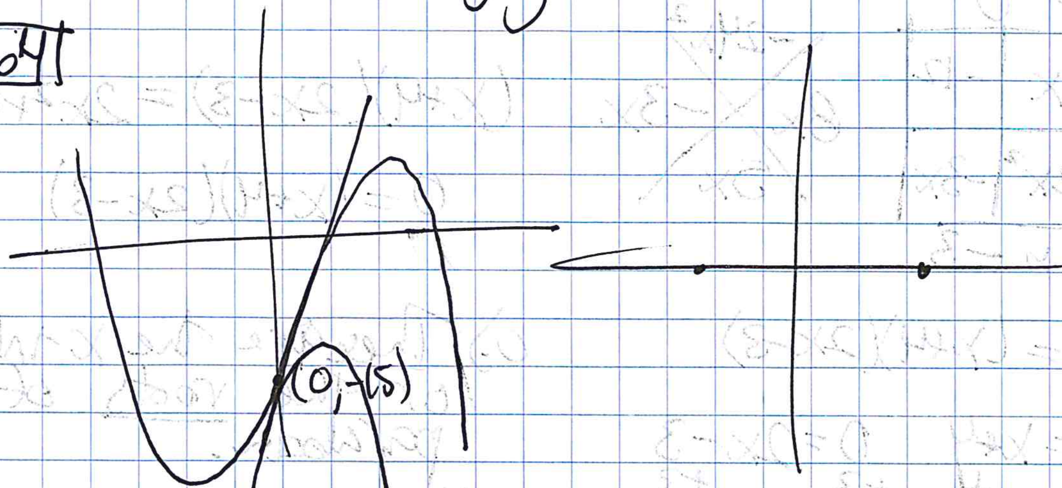
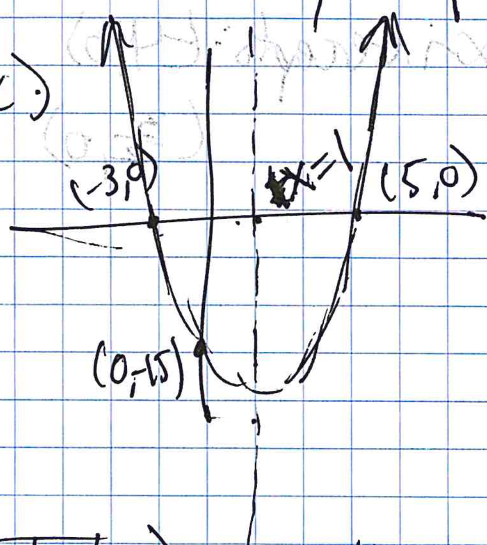
8.2.2 #64-~~68~~ + Classifying W.S.

$\boxed{8-64}$



c.)



$\boxed{8-65}$ a.) For all x-intercepts, the y-value will be 0.
For all y-intercepts, the x-value will be 0.

b.) (0,-12): y-intercept $y=2(0)^2+5(0)-12$ $\boxed{y=-12}$

c.) $0=2x^2+5x-12$

d.) No, at this point we cannot solve because of the x^2 and the bx term.

$\boxed{\text{Solutions}}$ of a quadratic are called $\boxed{\text{roots}}$, and are the $\boxed{\text{zeros}}$ of the equation.

$\boxed{8-66}$ If the product of 2 or more numbers is zero then you know one of the numbers must be 0.

$\boxed{\text{Zero Product Property}}$

8-67 a.) $y = 2x^2 + 5x - 12$

	$2x$	-3
$+4$	$8x$	-12
x	$2x^2$	$-3x$

$-24x^2$

$8x \quad -3x$

$5x$

$(x+4)(2x-3) = 2x^2+5x-12$

$0 = (x+4)(2x-3)$

b.) $0 = (x+4)(2x-3)$

$0 = x+4$
$-4 \quad -4$
$\boxed{x = -4}$

$0 = 2x-3$
$+3 \quad +3$
$\frac{3}{2} = \frac{2x}{2}$
$\boxed{\frac{3}{2} = x}$

c.) These are the x-intercepts or the roots of the parabola.

d.) x-intercepts: $(-4, 0)$

$(\frac{3}{2}, 0)$