

Solving inequalities:

$$9 + 6x - x^2 \leq x - 5$$

c b a
9 6 -1

y-int = 9

line of symmetry: $-\frac{b}{2a} = -\frac{6}{-2} = 3$

max: $(3, 18)$

put in for x $9 + 18 - 9$

intersect? $9 + 6x - x^2 = x - 5$

$$0 = x^2 - 4x - 14$$

$$0 = (x+2)(x-7)$$

$$x = -2 \text{ or } 7$$

