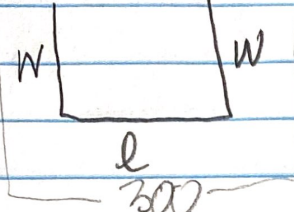
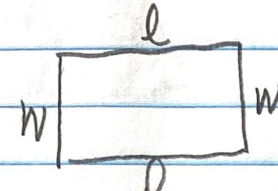


Quadratic Context WS

①  300 ft of fencing Area = length · width
 $l = 300 - 2w$
 $l = \text{length}$ $w = \text{width}$
 $A(w) = w(300 - 2w)$

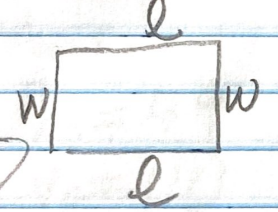
②  $P = 40 \text{ ft}$ $w = \text{width}$ $l = \text{length}$

$$l = \frac{40 - 2w}{2} \leftarrow \text{simplify!}$$

P = Perimeter

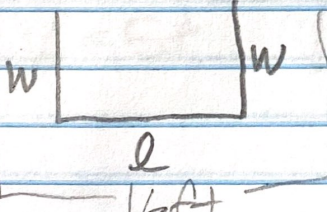
$$l = 20 - w$$

$$A(w) = w(20 - w)$$

③  $P = 100 \text{ ft}$
 $l = \text{length}$ $w = \text{width}$

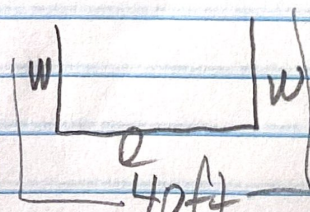
$$l = \frac{100 - 2w}{2} \quad l = 50 - w$$

$$A(w) = w(50 - w)$$

④  $l = \text{length}$ $w = \text{width}$

$$l = 16 - 2w$$

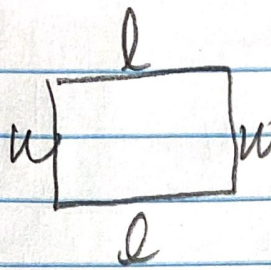
$$A(w) = w(16 - 2w)$$

⑤  $l = \text{length}$ $w = \text{width}$

$$l = \frac{40 - 2w}{2}$$

$$A(w) = w(40 - 2w)$$

Quadratic Context WS

②  Perimeter = 250 ft $A(w) = w(125 - w)$

$$l = \frac{250 - 2w}{2} \quad l = 125 - w$$

① $h_0 = 36$
 $v_0 = 82$ $h(t) = -16t^2 + 82t + 36$

② $h_0 = 12$
 $v_0 = 47$ $h(t) = -16t^2 + 47t + 12$

③ $h_0 = 49$
 $v_0 = 110$ $h(t) = -16t^2 + 110t + 49$

④ $h_0 = 7$
 $v_0 = 54$ $h(t) = -16t^2 + 54t + 7$