



From Question A:
 $v_x = 19.2 \text{ m/s}$
 $v_y = 16.1 \text{ m/s}$

$$v_{\text{wind}} = -8 \text{ m/s}$$

- c) The wind blows in a horizontal direction, so v_y is not affected.

Altitude remains constant

- d) Wind blows against the rocket's velocity, so

$$v_x = 19.2 \text{ m/s} - 8 \text{ m/s} = 11.2 \text{ m/s}$$

$$t = 3.3 \text{ sec (from Question A)}$$

$$d_x = v_x \cdot t$$

$$= (11.2 \text{ m/s}) \cdot (3.3 \text{ sec})$$

$d_x = 36.6 \text{ m}$