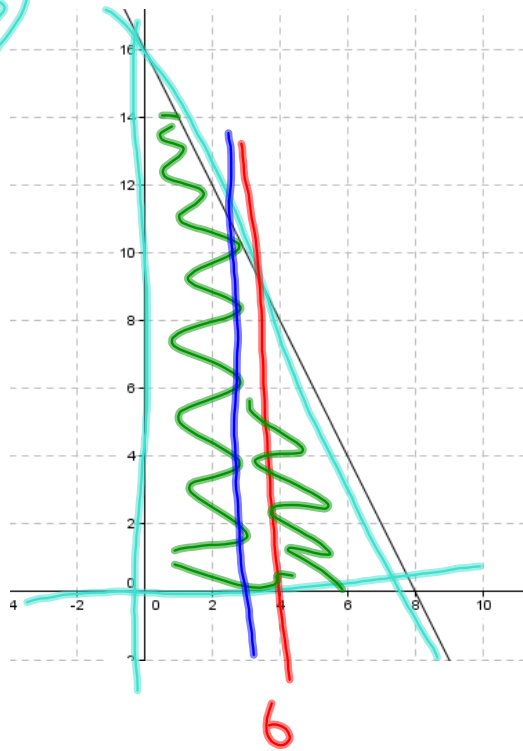


13)



$$\int_0^b (16 - 2x) dx = \int_b^8 (16 - 2x) dx$$

$$16x - x^2 \Big|_0^b = 16x - x^2 \Big|_b^8$$

$$16(b) - b^2 = 16(8) - 64 - (16b - b^2)$$

$$16(b) - b^2 = 128 - 64 - (16b - b^2)$$

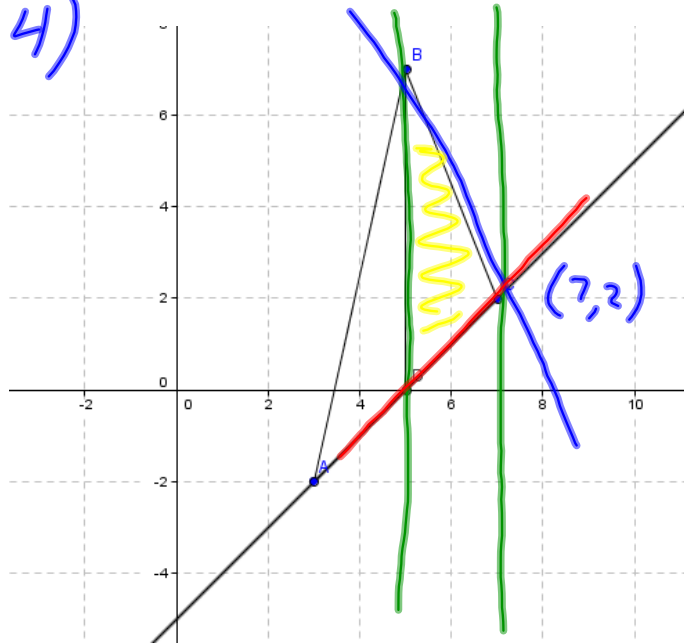
$$= 64 - 16b + b^2$$

$$0 = 64 - 32b + 2b^2$$

$$0 = b^2 - 16b + 32$$

$$b = 2.343$$

14)



$$\int_3^5 \left(4.5x - \frac{31}{2}\right) - (x-5)$$

$$\int_5^7 \left(-2.5x + \frac{39}{2}\right) - (x-5)$$