



$$\text{Slope} = \frac{y_2 - y_1}{x_2 - x_1}$$

$$BC = \frac{4-1}{-2-(-4)} = \frac{3}{2}$$

$$AD = \frac{6-(-3)}{4-(-2)} = \frac{9}{6} = \frac{3}{2}$$

m. dpt AB

$$\left(\frac{-2+(-4)}{2}, \frac{-3+1}{2} \right)$$

m. dpt CD

$$\left(\frac{-2+4}{2}, \frac{4+6}{2} \right)$$

$$X(-3, -1)$$

$$Y(1, 5)$$

Distance

CB XY AD

$$CB = \sqrt{(-2-(-4))^2 + (4-1)^2}$$

$$= \sqrt{(2)^2 + (3)^2}$$

$$= \sqrt{13}$$

$$XY = \sqrt{(-3-1)^2 + (-1-5)^2}$$

$$= \sqrt{(4)^2 + (6)^2}$$

$$= \sqrt{16+36} = \sqrt{52}$$

$$AD = \sqrt{(4+2)^2 + (6+3)^2}$$

$$= \sqrt{6^2 + 9^2}$$

$$= \sqrt{36+81}$$

$$= \sqrt{117}$$

$$\frac{\sqrt{13} + \sqrt{117}}{2} = \sqrt{52}$$

$$7.21 = 7.21$$