



## Quick Test - Pythagoras line segments

1. P is the point with coordinates (5, -1).  
Q is the point with coordinates (-3, -6)  
Calculate the **exact** length of PQ.

$$c^2 = a^2 + b^2$$
$$= 8^2 + 5^2$$

$$c^2 = 89$$

$$c = \sqrt{89}$$

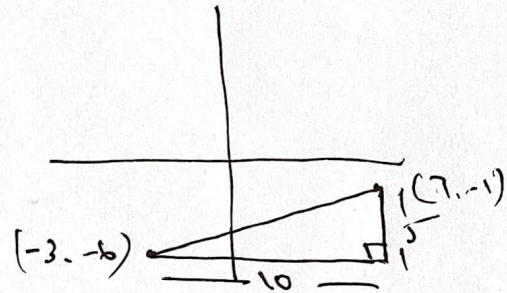
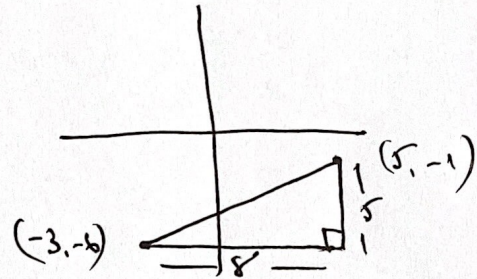
$$(\text{not } 9.433981132 \dots)$$

2. X is the point with coordinates (-3, -6).  
Y is the point with coordinates (7, -1)  
Calculate the **exact** length of XY.

$$c^2 = a^2 + b^2$$
$$= 10^2 + 5^2$$

$$c^2 = 125$$

$$c = \underline{\underline{5\sqrt{5}}}$$



3. L is the point with coordinates (-9, 10).  
M is the point with coordinates (1, -16)  
Calculate the length of LM.  
Give your answer correct to 3 decimal places.

$$c^2 = a^2 + b^2$$
$$= 26^2 + 10^2$$

$$c^2 = 776$$

$$c = 2\sqrt{194}$$
$$= \underline{\underline{27.857}} \quad (3 \text{ dp})$$

