Practice worksheet | Pythagoras' theorem

Practical length problems

Name: _____ Date: _____

6 questions | 14 marks

1. A rectangular screen is 12 cm by 16 cm. Find its diagonal. [2 marks]

2. A 17 m ladder has its foot 8 m from a perpendicular wall. Find the height reached. [2 marks]

3. A cable runs from the top of a 12 m pole to a point 5 m horizontally from its base. Find the taut cable length. [2 marks]

4. A 25 m wire reaches a pole top 24 m above level ground. Find the horizontal distance of its ground anchor from the pole. [2 marks]

5. A 15 m ladder moves from a foot distance of 9 m to a foot distance of 12 m from a wall. Find the vertical drop of its top. [3 marks]

6. A 6 m by 8 m rectangular garden has a diagonal path. How much shorter is that path than walking along one 6 m side and one 8 m side? [3 marks]