**2D Pythagoras**

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| Name : | Class : | Date : |

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| **1)** Find the missing length in the triangle pictured below   http://www.mathster.com/course/simgs/26429825430_1.png | [1] |
| **2)** Find the missing length in the triangle pictured below   http://www.mathster.com/course/simgs/26429825430_2.png | [1] |
| **3)** A right-angled triangle has two shorts side of length 27 cm and 36 cm. Find the length of the hypotenuse. | [1] |
| **4)** A right-angled triangle has a hypotenuse of length 40 cm and one short side of length 32 cm. Find the length of the other short side. | [1] |
| **5)** Find the missing length in the triangle pictured below, giving your answer to 3 significant figures   http://www.mathster.com/course/simgs/26429825430_3.png | [1] |
| **6)** Find the missing length in the triangle pictured below, giving your answer to 3 significant figures   http://www.mathster.com/course/simgs/26429825430_4.png | [1] |
| **7)** A right-angled triangle has short sides of length 8 cm and 10 cm. Find the length of the hypotenuse, giving your answer to 3 significant figures. | [1] |
| **8)** A right-angled triangle has a hypotenuse of length 12 cm and a short side of length 9 cm. Find the length of the other short side, giving your answer to 3 significant figures. | [1] |
| **9)** The base of a ladder is 8 metres from a wall. The height of the wall is 9 metres. What is the minimum height the ladder must be to reach the top of the wall? (give your answer to 3 significant figures) | [1] |
| **10)** Find the distance between the coordinates   and  , giving your answer to 3 significant figures | [1] |
| **11)** Find the length of the line segment shown below, giving your answer to 3 significant figures http://www.mathster.com/course/simgs/26429825430_5.png | [1] |
| **12)** The diagram shows a field with length 450 metres and width 210 metres.    http://www.mathster.com/course/simgs/26429825430_6.png  Find the diagonal distance across the field. Give your answer to the nearest metre. | [1] |

**Solutions for the assessment 2D Pythagoras**

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| **1)**   = 40 cm | **2)**   = 72 cm |
| **3)**   = 45 cm | **4)**   = 24 cm |
| **5)**   = 13.9 cm | **6)**   = 12.5 cm |
| **7)**   = 12.8 cm | **8)**   = 7.94 cm |
| **9)** Height = 12.0 cm | **10)**  Distance =   Distance =   Distance = 2.24` |
| **11)**  Length =   Length =   Length = 2.83` | **12)** Diagonal distance = 497 m |