L7

Grade: 4

Progression : Light

Pythagoras Word Problems

ANSWERS

Give answers to 2 decimal places.

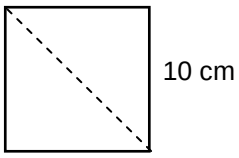
Section A

1) *An A4 piece of paper measures 210 mm by 297 mm.*

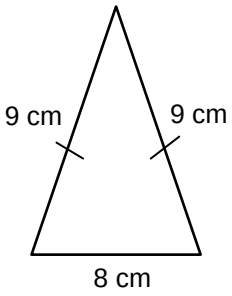
a. *Calculate the length of the diagonal of an A4 piece of paper.* 363.74 mm

b. *Measure the length of the diagonal of an A4 piece of paper to check your answer to part a.*
The same (possible measurement errors)

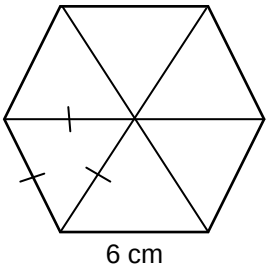
2) *How long is the diagonal of a square with sides 10 cm ?*
14.14 cm



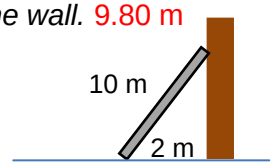
3) *Find the area of an isosceles triangle whose sides are 9 cm, 9 cm and 8 cm.*
[Hint: Calculate the perpendicular height first.]
32.25 cm^2



4) *Calculate the area of a hexagon whose sides measure 6 cm.*
93. 53 cm^2



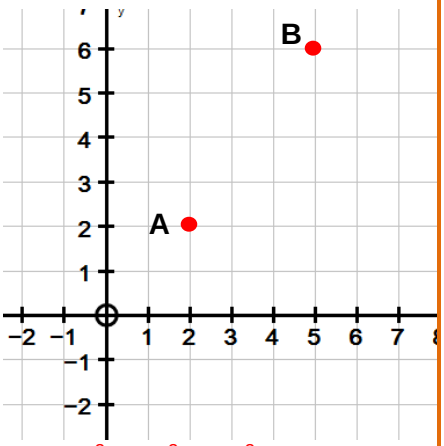
5) *A ladder, 10 m long, leans against a wall. The foot of the ladder is 2 m away from the bottom of the wall. Calculate how far the ladder reaches up the wall.* 9.80 m



6) *Points A (2, 2) and B (5, 6) are plotted on a coordinate grid.*

a. *What is the length of the line AB.* 5 (units)

b. *Point C has coordinates (3, - 1). Work out the length of BC.*
7.28 (units)



7) *Calculate the length between the coordinates P (- 1, 2) and R (6, - 2).*
[Hint: Plot the coordinates first.]
8.06 (units)

8) *Is the triangle with sides 8 cm, 15 cm and 17 cm a right angled triangle?* Yes. $8^2 + 15^2 = 17^2$

a. *Give measurements for the lengths of two different right-angled triangles.*
3 cm, 4 cm, 5 cm 5 cm, 12 cm, 13 cm etc

9) *Calculate the length marked x in this isosceles triangle.*
[Hint: Find the area first.]
13.39 cm