PYTHAGORAS' THEOREM

Answer all of these questions. Remember to show your working out in all questions.

MAIN QUESTIONS

1.

Find the hypotenuse of a right-angled triangle with legs 3cm and 4cm

5cm

2.

Find the hypotenuse of a right-angled triangle with legs 6cm and 8cm

10cm

3.

Find the missing leg when hypotenuse is 13cm and one leg is 5cm

12cm

4.

Find the missing leg when hypotenuse is 17cm and one leg is 15cm

8cm

5.

Find the hypotenuse of a right-angled triangle with legs 9cm and 12cm

15cm

6.

Find the missing leg when hypotenuse is 25cm and one leg is 7cm

24cm

7.

Find the hypotenuse of a right-angled triangle with legs 15cm and 20cm

25cm

8.

Find the missing leg when hypotenuse is 29cm and one leg is 21cm

20cm

9.

Find the hypotenuse of a right-angled triangle with legs 10cm and 24cm

26cm

10.

Find the missing leg when hypotenuse is 41cm and one leg is 9cm

40cm

MASTER QUESTIONS

M1.

A ladder 5m long leans against a wall with its base 3m from the wall. How high up the wall does the ladder reach?

4m

M2.

A rectangular field measures 120m by 50m. What is the diagonal distance across the field?

> 130m

M3.

A ship sails 80km east then 60km north. How far is it from its starting point?

> 100km

M4.

A television screen measures 48cm by 36cm. What is the diagonal length of the screen?

> 60cm

M5.

A flagpole is secured by a wire 13m long attached 5m from the base. How tall is the flagpole?

> 12m