

\* Show all working clearly.

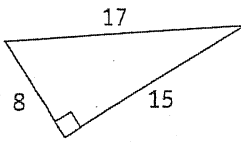
# PYTHAGORAS

Name: \_\_\_\_\_

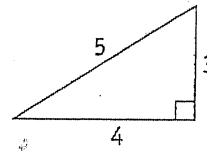
Date due: \_\_\_\_\_

Question 1; Prove that the following triangles are right-angled triangles.

a

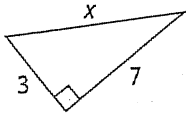


b

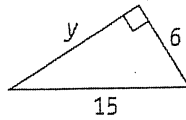


2. Find the length of the unknown side correct to 1 decimal place. All measurements are in centimetres.

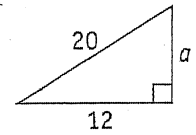
a)



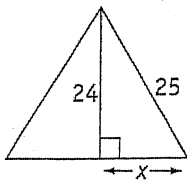
b)



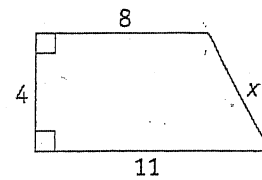
c)



d)



e)



Question 3. Which of the following are Pythagorean triads?

- |               |       |               |       |
|---------------|-------|---------------|-------|
| a {2, 4, 5}   | _____ | b {7, 12, 13} | _____ |
| d {8, 10, 12} | _____ | e {3, 4, 5}   | _____ |
| g {5, 12, 13} | _____ | h {8, 13, 17} | _____ |
| j {7, 24, 25} | _____ | k {9, 40, 41} | _____ |

4. Find the length of the diagonal of a rectangle of length 28 cm and width 9 cm, (Answer correct to 1 decimal place.)

5. A 6 metre ladder rests against a wall and its foot is 3 metres away from the base of the wall. How high does the ladder reach up the wall? (Answer correct to 2 decimal places.)