

Worksheet: The Baudhyana–Pythagoras Theorem

Rajasthan State Board · Class 8 · Mathematics · 8 questions · 14 marks

Name: _____

Date: _____

Score: _____ / 14

Q1. A right-angled triangle has legs of 9 cm and 12 cm. What is the length of its hypotenuse? *[1 mark]*

- A) 15 cm
- B) 21 cm
- C) 18 cm
- D) 13.5 cm

Q2. What is the length of the diagonal of a square whose side is 7 cm? *[1 mark]*

- A) 72 cm
- B) 14 cm
- C) 7 cm
- D) 49 cm

Q3. Which of the following is NOT a Baudhyana (Pythagorean) triple? *[1 mark]*

- A) (6, 8, 11)
- B) (6, 8, 10)
- C) (9, 12, 15)
- D) (12, 16, 20)

Q4. A square is drawn on a dotted grid with all four corners on grid dots. Which of these areas is IMPOSSIBLE for such a square? *[1 mark]*

- A) 3 sq units
- B) 2 sq units
- C) 4 sq units
- D) 5 sq units

Q5. The hypotenuse of an isosceles right-angled triangle is 8 cm. What is the length of each of its equal sides? *[1 mark]*

- A) 32 cm
- B) 4 cm
- C) 82 cm
- D) 64 cm

Q6. A ladder 25 m long rests against a vertical wall with its foot 7 m away from the wall. How far up the wall does the ladder reach? *[3 marks]*

Q7. A right-angled triangle has legs of length 5 and 6. Between which two numbers with one digit after the decimal point does its hypotenuse lie? Show the squaring that proves it. *[3 marks]*

Q8. Is (5, 12, 13) a scaled version of a smaller Baudhyana triple? Justify your answer, and then find the smallest scaled version of it in which all three numbers are greater than 100. *[3 marks]*
