

Choose most appropriate answer

1. Tshering is working on a construction project, and he needs a right-angled triangle with integer side lengths. Can you suggest a Pythagorean triplet that Tshering can use in his project?

- A) (3, 4, 5)
- B) (6, 8, 10)
- C) (5, 12, 13)
- D) All of the above

2. Kamala is designing a rectangular garden, and she wants the diagonals of the garden to be whole numbers. Which of the following sets of side lengths would create a rectangular garden?

- A) Length = 7 meters, Width = 24 meters
- B) Length = 8 meters, Width = 15 meters
- C) Length = 10 meters, Width = 12 meters
- D) Length = 9 meters, Width = 40 meters

3. Pasam is constructing a triangular roof, and she wants it to be a right-angled triangle with side lengths in a Pythagorean triplet. If he chooses a triplet where the two shorter sides have lengths 9 meters and 12 meters, what is the length of the hypotenuse?

- A) 15 meters
- B) 18 meters
- C) 21 meters
- D) 24 meters