Name: _____ **Class:** _____ **Date:** _____ **ID: A**

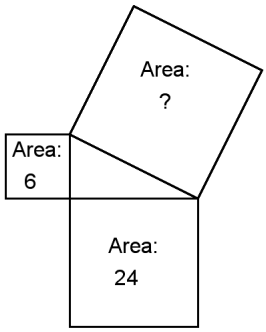
Final Exam Review - Unit 1

Multiple Choice
Identify the choice that best completes the statement or answers the question.

____ 1. Which 2 consecutive square numbers is 54 between?
a. 53 and 55 b. 28 and 32 c. 49 and 64 d. 12 and 16

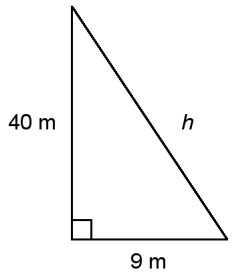
____ 2. The side length of a square is $\sqrt{49}$ cm. Find its area.
a. 49 cm^2 b. 24.5 cm^2 c. 2401 cm^2 d. 7 cm^2

____ 3. Find the area of the indicated square.



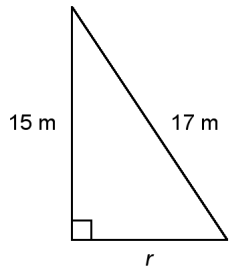
a. 144 square units
b. 18 square units
c. 5.5 square units
d. 30 square units

____ 4. Find the length of the hypotenuse.



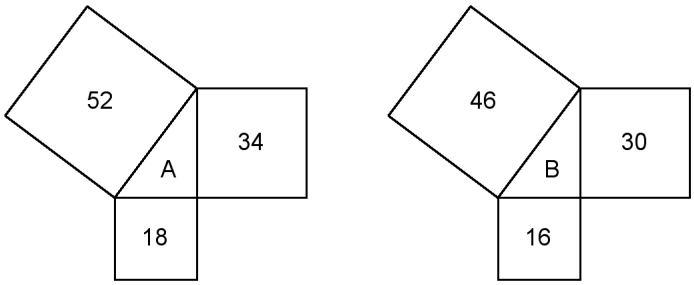
a. 40 m b. 43 m c. 42 m d. 41 m

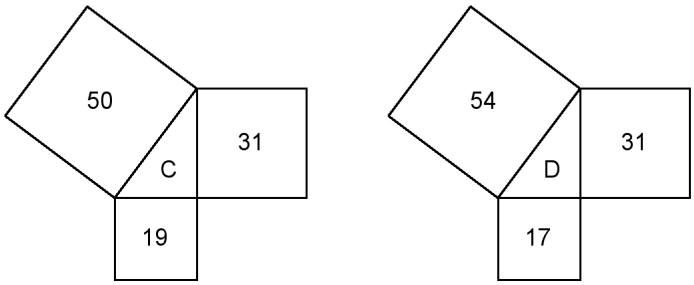
____ 5. Find the length of the leg labelled *r*.



a. 19 m b. 8 m c. 16 m d. 13 m

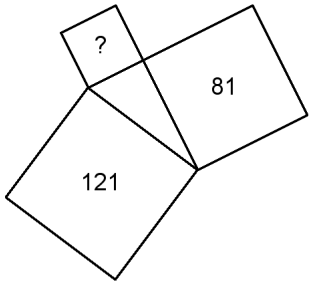
____ 6. The area, in square centimetres, of the square on each side of a triangle is given. Which triangle is NOT a right triangle?





a. Triangle D b. Triangle C c. Triangle B d. Triangle A

____ 7. The areas, in square centimetres, of the largest square and one of the smaller squares on the sides of a right triangle are given. Determine the area of the third square.



a. 6 cm^2 b. 202 cm^2 c. 2 cm^2 d. 40 cm^2

____ 8. The legs of a right triangle measure 7 cm and 6 cm. What is the length of the hypotenuse?

a. $\sqrt{85}$ cm b. 85 cm c. 13 cm d. 169 cm

____ 9. In a right triangle, the length of the hypotenuse is 18 m and the length of one of the legs is 15 m. Find the length of the other leg. Round your answer to the nearest tenth.

a. 5.0 m b. 6.8 m c. 9.9 m d. 23.4 m

Final Exam Review - Unit 1
Answer Section

MULTIPLE CHOICE

1. ANS: C PTS: 1 DIF: Easy
   REF: 1.1 Square Numbers and Area Models LOC: 8.N1
   TOP: Number KEY: Conceptual Understanding
2. ANS: A PTS: 1 DIF: Easy REF: 1.3 Measuring Line Segments
   LOC: 8.N1 TOP: Number KEY: Conceptual Understanding
3. ANS: D PTS: 1 DIF: Easy REF: 1.5 The Pythagorean Theorem
   LOC: 8.N1 | 8.SS1 TOP: Number | Shape and Space (Measurement)
   KEY: Conceptual Understanding
4. ANS: D PTS: 1 DIF: Easy REF: 1.5 The Pythagorean Theorem
   LOC: 8.N1 | 8.SS1 TOP: Number | Shape and Space (Measurement)
   KEY: Conceptual Understanding
5. ANS: B PTS: 1 DIF: Easy REF: 1.5 The Pythagorean Theorem
   LOC: 8.N1 | 8.SS1 TOP: Number | Shape and Space (Measurement)
   KEY: Conceptual Understanding
6. ANS: A PTS: 1 DIF: Easy
   REF: 1.6 Exploring the Pythagorean Theorem LOC: 8.SS1
   TOP: Shape and Space (Measurement) KEY: Conceptual Understanding
7. ANS: D PTS: 1 DIF: Easy
   REF: 1.6 Exploring the Pythagorean Theorem LOC: 8.SS1
   TOP: Shape and Space (Measurement) KEY: Conceptual Understanding
8. ANS: A PTS: 1 DIF: Easy
   REF: 1.6 Exploring the Pythagorean Theorem LOC: 8.SS1
   TOP: Shape and Space (Measurement) KEY: Conceptual Understanding
9. ANS: C PTS: 1 DIF: Easy
   REF: 1.7 Applying the Pythagorean Theorem LOC: 8.SS1
   TOP: Shape and Space (Measurement) KEY: Conceptual Understanding