8th Grade Pythagorean Theorem: Find the Missing Side

Common Core 8.G.B.7 Time: 30 min Total: 17 marks Two-sided: questions continue on the back

G8PYT1

NAME or INITIALS (BLOCK CAPITALS, one letter per box)

ANSWER KEY — not for students, do not scan

ANSWERS — write each final answer in its box. Only these boxes are marked.

1	5	2	10	3	13
4	15	5	24	6	12
7	29	8	10		

1 A right triangle has legs of 3 cm and 4 cm. How long is the hypotenuse, in cm? **1 mark**

5

answer in box 1 on the front

2 A right triangle has legs of 6 cm and 8 cm. How long is the hypotenuse, in cm? **1 mark**

10

answer in box 2 on the front

3 A right triangle has legs of 5 m and 12 m. How long is the hypotenuse, in meters? **2 marks**

13

answer in box 3 on the front

4 A right triangle has a hypotenuse of 17 cm and one leg of 8 cm. How long is the other leg, in cm? **2 marks**

15

answer in box 4 on the front

Questions continue on the back. Only the answer boxes above are marked.

5 **2 marks**

A right triangle has a hypotenuse of 25 in and one leg of 7 in. How long is the other leg, in inches?

24

answer in box 5 on the front

6 **3 marks**

A 13-foot ladder leans against a wall. Its foot is 5 feet from the wall. How high up the wall does it reach, in feet?

12

answer in box 6 on the front

7 **3 marks**

A rectangle is 20 inches long and 21 inches wide. How long is its diagonal, in inches?

29

answer in box 7 on the front

8 **3 marks**

Find the distance between the points $(1,\ 2)$ and $(7,\ 10)$.

10

answer in box 8 on the front