

G.SRT.C.8: Pythagorean Theorem 4

- 1 The set of integers $\{3,4,5\}$ is a Pythagorean triple.
Another such set is
 - 1) $\{6,7,8\}$
 - 2) $\{6,8,12\}$
 - 3) $\{6,12,13\}$
 - 4) $\{8,15,17\}$
- 2 Which set of numbers could represent the lengths of the sides of a right triangle?
 - 1) $\{2,3,4\}$
 - 2) $\{5,9,13\}$
 - 3) $\{7,7,12\}$
 - 4) $\{8,15,17\}$
- 3 The lengths of the sides of a right triangle can be
 - 1) 9,12,15
 - 2) 8,10,13
 - 3) 5,5,10
 - 4) 4,5,6
- 4 Which set of numbers represents the lengths of the sides of a right triangle?
 - 1) $\{7,24,25\}$
 - 2) $\{9,16,23\}$
 - 3) $\{10,12,14\}$
 - 4) $\{14,16,18\}$
- 5 Which set of numbers could be the lengths of the sides of a right triangle?
 - 1) $\{10,24,26\}$
 - 2) $\{12,16,30\}$
 - 3) $\{3,4,6\}$
 - 4) $\{4,7,8\}$
- 6 Which set of numbers does *not* represent the sides of a right triangle?
 - 1) $\{6,8,10\}$
 - 2) $\{8,15,17\}$
 - 3) $\{8,24,25\}$
 - 4) $\{15,36,39\}$
- 7 Which set of numbers could *not* represent the lengths of the sides of a right triangle?
 - 1) $\{1,3,\sqrt{10}\}$
 - 2) $\{2,3,4\}$
 - 3) $\{3,4,5\}$
 - 4) $\{8,15,17\}$

**G.SRT.C.8: Pythagorean Theorem 4
Answer Section**

1 ANS: 4

$$8^2 + 15^2 = 17^2$$

$$64 + 225 = 289$$

REF: 060009a

2 ANS: 4

$$8^2 + 15^2 = 17^2$$

REF: 081418ge

3 ANS: 1

REF: 061415ia

4 ANS: 1

$$7^2 + 24^2 = 25^2$$

REF: 011526ia

5 ANS: 1

$$10^2 + 24^2 = 26^2$$

10, 24, 26 is a multiple of the 5, 12, 13 triangle.

$$100 + 576 = 676$$

REF: 010827a

6 ANS: 3

$$8^2 + 24^2 \neq 25^2$$

REF: 011111ge

7 ANS: 2

$$2^2 + 3^2 \neq 4^2$$

REF: 011316ge