

Squares and Square Roots

For any natural number $m > 1$

EXERCISE

1. Fill in the Blanks:

Q1. Find the Pythagorean triplet(s) for $m = 2$.

For $m = 2$, a Pythagorean triplet is (____, ____, ____).

Q2. Find the Pythagorean triplet(s) for $m = 3$.

For $m = 3$, a Pythagorean triplet is (____, ____, ____).

Q3. Find the Pythagorean triplet(s) for $m = 4$.

For $m = 4$, a Pythagorean triplet is (____, ____, ____).

Q4. Find the Pythagorean triplet(s) for $m = 5$.

For $m = 5$, a Pythagorean triplet is (____, ____, ____).

Q5. Find the Pythagorean triplet(s) for $m = 7$.

For $m = 7$, a Pythagorean triplet is (____, ____, ____).

2. True or False:

Q1. A Pythagorean triplet for $m = 3$ could be (3, 4, 5).

Q2. A Pythagorean triplet for $m = 5$ could be (10, 24, 26).

Q3. Pythagorean triplets can be found for any value of "m," including prime numbers.

ANSWER KEY

1.

Q1. (3, 4, 5)

Q2. (8, 6, 10)

Q3. (15, 8, 17)

Q4. (24, 10, 26)

Q5. (14, 48, 50)

2.

Q1. True

Q2. True

Q3. True