# mobius

Math worksheet on *'Pythagorean Equation from Variables - Either Missing Length (Squared Values) (Level 1)'*. Part of a broader unit on *'Pythagoras - Foundations'*

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**1** Find what the square of 'b' would be equal to

$$a^2 + b^2 = c^2$$
$$a = 4$$
$$b = ?$$
$$c = 6$$

| a | b |
|---|---|
| $b^2 = 7$ | $b^2 = 576$ |
| **c** | **d** |
| $b^2 = 12$ | $b^2 = 20$ |
| **e** | **f** |
| $b^2 = 100$ | $b^2 = 42$ |

**2** Find what the square of 'c' would be equal to

$$a^2 + b^2 = c^2$$
$$a = 6$$
$$b = 3$$
$$c = ?$$

| a | b |
|---|---|
| $c^2 = 70$ | $c^2 = 81$ |
| **c** | **d** |
| $c^2 = 45$ | $c^2 = 101$ |
| **e** | **f** |
| $c^2 = 25$ | $c^2 = 27$ |

**3** Find what the square of 'a' would be equal to

$$a^2 + b^2 = c^2$$
$$a = ?$$
$$b = 3$$
$$c = 9$$

| a | b |
|---|---|
| $a^2 = 144$ | $a^2 = 46$ |
| **c** | **d** |
| $a^2 = 20$ | $a^2 = 141$ |
| **e** | **f** |
| $a^2 = 72$ | $a^2 = 104$ |

**4** Find what the square of 'b' would be equal to

$$a^2 + b^2 = c^2$$
$$a = 4$$
$$b = ?$$
$$c = 5$$

| a | b | c |
|---|---|---|
| $b^2 = 13$ | $b^2 = 21$ | $b^2 = 9$ |
| **d** | **e** | **f** |
| $b^2 = 18$ | $b^2 = 15$ | $b^2 = 81$ |

**5** Find what the square of 'c' would be equal to

$$a^2 + b^2 = c^2$$
$$a = 2$$
$$b = 2$$
$$c = ?$$

| a | b | c |
|---|---|---|
| $c^2 = 4$ | $c^2 = 20$ | $c^2 = 1$ |
| **d** | **e** | **f** |
| $c^2 = 8$ | $c^2 = 13$ | $c^2 = 16$ |

**6** Find what the square of 'b' would be equal to

$$a^2 + b^2 = c^2$$
$$a = 3$$
$$b = ?$$
$$c = 5$$

| a | b |
|---|---|
| $b^2 = 1$ | $b^2 = 9$ |
| **c** | **d** |
| $b^2 = 6$ | $b^2 = 64$ |
| **e** | **f** |
| $b^2 = 225$ | $b^2 = 16$ |

**7** Find what the square of 'a' would be equal to

$$a^2 + b^2 = c^2$$
$$a = ?$$
$$b = 4$$
$$c = 9$$

| a | b |
|---|---|
| $a^2 = 1,296$ | $a^2 = 32$ |
| **c** | **d** |
| $a^2 = 82$ | $a^2 = 110$ |
| **e** | **f** |
| $a^2 = 65$ | $a^2 = 169$ |