

Always, Sometimes, Never:

An even number has an even amount of factors

An odd number has an odd amount of factors

True or False? The bigger the number, the more factors it has.

Answers

Statement 1—An even number has an even amount of factors.

This is often true, for example: 6 has 4 factors: 1, 2, 3, 6

12 has 6 factors: 1, 2, 3, 4, 6, 12

However, there are some exceptions, for example, 4 has 3 factors: 1, 2, 4

36 has 9 factors: 1, 2, 3, 4, 6, 9, 12, 18, 36

This means that Statement 1 is **sometimes** true.

Statement 2—An odd number has an odd amount of factors.

This is sometimes true: 25 has 3 factors: 1, 5, 25

However, it is sometimes not true: 21 has 4 factors: 1, 3, 7, 21

This means that Statement 2 is **sometimes** true.

Statement 3—The bigger the number, the more factors it has.

This is false. For example, the number 12 has 6 factors (1, 2, 3, 4, 6, 12) but the number 15, which is larger, only has 4 factors (1, 3, 5, 15).