

4

Millie is attempting to use proof by contradiction to show that the result of multiplying an irrational number by a non-zero rational number is always an irrational number.

Select the assumption she should make to start her proof.

Tick (✓) **one** box.

[1 mark]

Every irrational multiplied by a non-zero rational is irrational.

Every irrational multiplied by a non-zero rational is rational.

There exists a non-zero rational and an irrational whose product is irrational.

There exists a non-zero rational and an irrational whose product is rational.