Testing conjectures

‘When you add two odd numbers together the answer will be an even number.’

Use the table to record your examples to decide if the conjecture is true or that you can suggest counter examples.

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| --- | --- | --- | --- | --- | --- |
| **Number** | **Operation**  **+   ×** | **Number** | **Equals** | **Answer** | **Even or odd** |
| 3 | + | 7 | = | 10 | Even |
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Is the conjecture true, not true or sometimes true?

Explain your answer.

**‘When you multiply an even and an odd number together, the answer will always be even.’**

Use the table to record your examples to decide if the conjecture is true or that you can suggest counter examples.

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| --- | --- | --- | --- | --- | --- |
| **Number** | **Operation**  **+   ×** | **Number** | **Equals** | **Answer** | **Even or odd** |
| 3 | **×** | 4 | = | 12 | Even |
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Is the conjecture true, not true or sometimes true?

Explain your answer.

Now come up with your own conjecture about odd and even numbers.

Can you try different mathematical operations?

Use the table provided to record your results.

My conjecture is …

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| **Number** | **Operation**  **+  - × ÷** | **Number** | **Equals** | **Answer** | **Even or odd** |
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Is your conjecture true, not true or sometimes true?

Explain your answer.