



New Maths GCSE: A6 - Algebraic Proof

Name:

Date:

$$4n + 12$$

If n is a positive integer, the above is a multiple of:

- | | | | |
|----------|---|----------|---------------------|
| A | 4 | B | 12 |
| C | 3 | D | None of the options |

Correct Answer: A B C D

Explanation:

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$$6n + 9$$

If n is a positive integer, the above is a multiple of:

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|----------|---|----------|---------------------|
| A | 9 | B | 6 |
| C | 3 | D | None of the options |

Correct Answer: A B C D

Explanation:

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$$8n^2 - 6n$$

If n is a positive integer, the above is a multiple of:

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|----------|---|----------|---------------------|
| A | 2 | B | 8 |
| C | 6 | D | None of the options |

Correct Answer: A B C D

Explanation:

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$12n^2 + 9n$

If n is a positive integer, the above is a multiple of:

A 12

B 3

C 6

D None of the options

Correct Answer: A B C D

Explanation:

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$8n^2 - 4n + 1$

If n is a positive integer, the above is a multiple of:

A 2

B 8

C 4

D None of the options

Correct Answer: A B C D

Explanation:

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If n is a positive integer, which of the following numbers is always odd?

A $n + 1$

B $2n - 1$

C $3n$

D $n^2 + 1$

Correct Answer: A B C D

Explanation:

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If n is a positive integer, which of the following numbers is always even

A $n^2 - 2$

B $3n + 4$

C $2n + 6$

D $n + 2$

Correct Answer: A B C D

Explanation:

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If n is a positive integer, which of the following shows two consecutive square numbers?

- A** n^2 and $n^2 + 2$
- B** n^2 and $(n + 2)^2$
- C** n^2 and $(n + 1)^2$
- D** n^2 and $n^2 + 1$

Correct Answer: A B C D

Explanation:

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If n is a positive integer, which of the following shows two consecutive odd numbers?

- A** $2n - 1$ and $2n + 1$
- B** n and $n + 1$
- C** n and $n + 3$
- D** $2n$ and $2n + 1$

Correct Answer: A B C D

Explanation:

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If n is a positive integer, which of the following shows two consecutive even numbers?

- A** n and $n + 1$
- B** n and $n + 2$
- C** $2n + 8$ and $2n + 10$
- D** $2n + 1$ and $2n + 3$

Correct Answer: A B C D

Explanation:

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