New Maths GCSE: A4 - Higher Factorising Quadratics

Name:..... Date:.....

$x^2 + 7x + 12$

Which is a correct factorisation of the quadratic expression?

A) $(x + 6)(x + 2)$

B) $(x + 5)(x + 2)$

C) $(x + 4)(x + 3)$

D) $(x + 6)(x + 1)$

Correct Answer: A B C D

Explanation:

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$x^2 + 6x + 9$

Which is a correct factorisation of the quadratic expression?

A) $(x + 3)(x + 3)$

B) $(x + 4)(x + 2)$

C) $(x + 3)$

D) $(x + 3)(x - 3)$

Correct Answer: A B C D

Explanation:

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$x^2 + 3x - 10$

Which is a correct factorisation of the quadratic expression?

A) $(x + 5)(x + 2)$

B) $(x - 5)(x + 2)$

C) $(x + 5)(x - 2)$

D) $(x - 5)(x - 2)$

Correct Answer: A B C D

Explanation:

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$x^2 - 16$

Which is a correct factorisation of the quadratic expression?

A) $(x + 8)(x - 8)$

B) $(x - 4)^2$

C) $(x + 4)(x - 4)$

D) Doesn't factorise

Correct Answer: A B C D

Explanation:

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$x^2 - 4x$

Which is a correct factorisation of the quadratic expression?

A) $(x + 2)(x - 2)$

B) $x(x - 4)$

C) $(x + 1)(x - 4)$

D) Doesn't factorise

Correct Answer: A B C D

Explanation:

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$x^2 - 2x - 8$

Which is a correct factorisation of the quadratic expression?

A) $(x - 4)(x - 2)$

B) $(x + 4)(x + 2)$

C) $(x - 4)(x + 2)$

D) $(x + 4)(x - 2)$

Correct Answer: A B C D

Explanation:

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$x^2 - 7x + 10$

Which is a correct factorisation of the quadratic expression?

A) $(x - 5)(x - 2)$

B) $(x + 5)(x + 2)$

C) $(x + 5)(x - 2)$

D) $(x - 5)(x + 2)$

Correct Answer: A B C D

Explanation:

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$2x^2 + 11x + 5$

Which is a correct factorisation of the quadratic expression?

A) $(2x + 5)(2x + 1)$

B) $(2x + 5)(x + 1)$

C) $(2x + 1)(x + 5)$

D) $(2x + 6)(x + 5)$

Correct Answer: A B C D

Explanation:

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$3x^2 + 17x - 6$

Which is a correct factorisation of the quadratic expression?

A) $(3x + 6)(x - 1)$

B) $(3x + 1)(x - 6)$

C) $(3x - 6)(x + 1)$

D) $(3x - 1)(x + 6)$

Correct Answer: A B C D

Explanation:

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$16x^2 - 9$

Which is a correct factorisation of the quadratic expression?

A) $(8x + 3)(2x - 3)$

B) $(8x + 3)(8x - 3)$

C) $((x + 3)(x - 3))^2$

D) $(4x + 3)(4x - 3)$

Correct Answer: A B C D

Explanation:

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