



# New Maths GCSE: A18 - Solving quadratic equations by factorising

Name:.....

Date:.....

$(x + 5)(x - 2) = 0$

What is the solution to the equation above?

**A**  $x = 5, x = -2$    **B**  $x^2 + 3x - 10$

**C**  $x = -5, x = 2$    **D**  $x = -10$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$(x - 6)(x + 1) = 0$

What is the solution to the equation above?

**A**  $x = -6$    **B**  $x = -6, x = 1$

**C**  $x^2 - 5x - 6$    **D**  $x = 6, x = -1$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$(x - 2)(x - 3) = 0$

What is the solution to the equation above?

**A**  $x = -2, x = -3$    **B**  $x = 6$

**C**  $x = 2, x = 3$    **D**  $x^2 - 5x + 6$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$(x + 1)(x + 7) = 0$$

What is the solution to the equation above?

**A**  $x = 7$       **B**  $x = -1, x = -7$

**C**  $x^2 + 8x + 7$     **D**  $x = 1, x = 7$

Correct Answer: A B C D

Explanation:

.....  
.....  
.....  
.....  
.....

$$(x + 5)^2 = 0$$

What is the solution to the equation above?

**A**  $x = -5$       **B**  $x = 5$

**C**  $x = 25$       **D**  $x = -5 \text{ or } 5$

Correct Answer: A B C D

Explanation:

.....  
.....  
.....  
.....  
.....

$$(x - 3)^2 = 0$$

What is the solution to the equation above?

**A**  $x = -3 \text{ or } 3$     **B**  $x = 9$

**C**  $x = 3$       **D**  $x = -3$

Correct Answer: A B C D

Explanation:

.....  
.....  
.....  
.....  
.....

$$2(x + 1)(x - 5) = 0$$

What is the solution to the equation above?

**A**  $x = -1, x = 5$     **B**  $x = 2, x = -10$

**C**  $x = 1, x = -5$     **D**  $x = -2, x = 10$

Correct Answer: A B C D

Explanation:

.....  
.....  
.....  
.....  
.....

$$3(x - 4)(x + 1) = 0$$

What is the solution to the equation above?

**A**  $x = -4, x = 1$    **B**  $x = -8, x = 2$

**C**  $x = 4, x = -1$    **D**  $x = 8, x = -2$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$x^2 = 9$$

What is the solution to the equation above?

**A**  $x = 3, -3$    **B**  $x = 81$

**C**  $x = 4.5$    **D**  $x = 3$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$x^2 = 16$$

What is the solution to the equation above?

**A**  $x = 8$    **B**  $x = 4$

**C**  $x = 4, -4$    **D**  $x = 256$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$4x^2 = 64$$

What is the solution to the equation above?

**A**  $x = 2, -2$    **B**  $x = 2$

**C**  $x = 4, -4$    **D**  $x = 4$

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....

$$x^2 = -4$$

What is the solution to the equation above?

**A**  $x = 2, -2$

**B**  $x = 16$

**C**  $x = -2$

**D** No real solutions

Correct Answer: A B C D

Explanation:

.....

.....

.....

.....

.....

.....