New Maths GCSE: A22 - Solving Quadratic Inequalities

Name:..   Date:...

What is the solution to $(x + 1)(x - 3) < 0$?

A $x < -1 \text{ and } x > 3$ B $x < -1 \text{ or } x > 3$

C $-1 < x < 3$ D $-1 > x > 3$

Correct Answer: A B C D

Explanation:

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What is the solution to $(x + 2)(x - 1) > 0$?

A $x < -2 \text{ or } x > 1$ B $-2 < x < 1$

C $x < -2 \text{ and } x > 1$ D $-2 > x > 1$

Correct Answer: A B C D

Explanation:

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What is the solution to $(x + 3)(x - 1) < 0$?

A $x < -3 \text{ and } x > 1$ B $-3 > x > 1$

C $x < -3 \text{ or } x > 1$ D $-3 < x < 1$
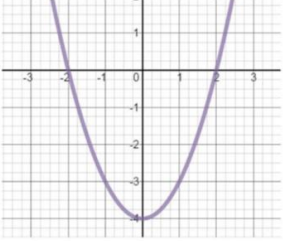
Correct Answer: A B C D

Explanation:

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What is the solution to

$(x + 2)(x - 2) > 0$?

A $-2 < x < 2$

B $x < -2 \; or \; x > 2$

C $-2 > x > 2$

D $x < -2 \; and \; x > 2$
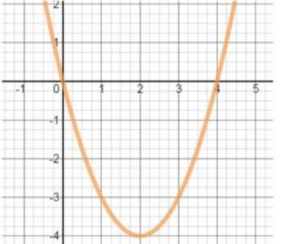
Correct Answer: A B C D

Explanation:

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What is the solution to

$x(x - 4) > 0$?

A $x < 0 \; or \; x > 4$

B $0 < x < 4$

C $x < 0 \; and \; x > 4$

D $0 > x > 4$

Correct Answer: A B C D

Explanation:

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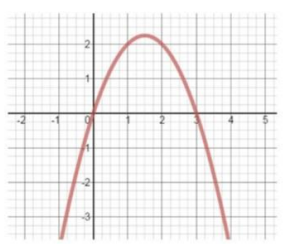
What is the solution to

$x(3 - x) > 0$?

A $0 < x < 3$

B $x < 0 \; or \; x > 3$

C $0 > x > 3$

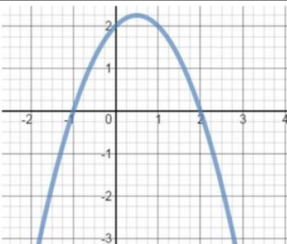D $x < 0 \; and \; x > 3$

Correct Answer: A B C D

Explanation:

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What is the solution to

$(2 - x)(x + 1) < 0$?

A $x < -1 \; and \; x > 2$

B $-1 > x > 2$

C $x < -1 \; or \; x > 2$

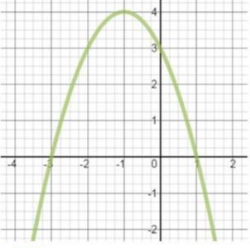D $-1 < x < 2$

Correct Answer: A B C D

Explanation:

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What is the solution to

$$(1-x)(x+3) < 0?$$

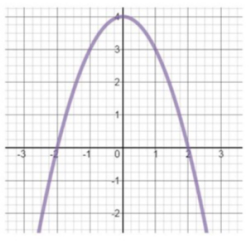|	
A $x < -3 \; or \; x > 1$	B $-3 < x < 1$
C $x < -3 \; and \; x > 1$	D $-3 > x > 1$

Correct Answer: A B C D

Explanation:

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What is the solution to

$$(2-x)(x+2) > 0?$$

A $x < -2 \; or \; x > 2$	B $-2 < x < 2$
C $-2 > x > 2$	D $x < -2 \; and \; x > 2$

Correct Answer: A B C D

Explanation:

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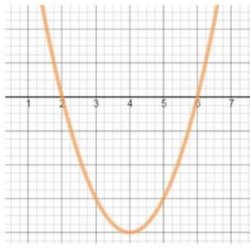
What is the solution to

$$0 < (x-2)(x-6)?$$

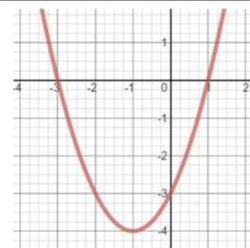|	
A $2 > x > 6$	B $x < 2 \; and \; x > 6$
C $x < 2 \; or \; x > 6$	D $2 < x < 6$

Correct Answer: A B C D

Explanation:

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What is the solution to

$$0 > (x-1)(x+3)?$$

A $x < -3 \; or \; x > 1$	B $-3 < x < 1$
C $-3 > x > 1$	D $x < -3 \; and \; x > 1$

Correct Answer: A B C D

Explanation:

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Find the solution of $x^2 + x - 12 < 0$.

A $\quad x < -4 \;\; or \;\; x > 3$

B $\quad x < -3 \;\; or \;\; x > 4$

C $\quad -4 < x < 3$

D $\quad -3 < x < 4$

Correct Answer: A B C D

Explanation:

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If $x^2 \leq 25$, then

(A) $\quad -5 \leq x \leq 5$

(B) $\quad -25 \leq x \leq 25$

(C) $\quad x \geq 5 \;\; or \;\; x \leq -5$

(D) $\quad 0 \leq x \leq 5$

Correct Answer: A B C D

Explanation:

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