New Maths GCSE: A22 - Higher Inequalities Collection!

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

Show x>-1 on a number line

A)

-5 -4 -3 -2 -1 0 1 2 3 4 5

B)

-5 -4 -3 -2 -1 0 1 2 3 4 5

C)

-5 -4 -3 -2 -1 0 1 2 3 4 5

D)

-5 -4 -3 -2 -1 0 1 2 3 4 5

Correct Answer: A B C D

Explanation:

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What inequality is shown by the number line?

1   13

A) $1 \leq X \leq 13$

B) $1 < X \leq 13$

C) $1 > X \geq 13$

D) $1 \leq X < 13$

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Correct Answer: A B C D

Explanation:

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n is an integer.

$-1 \leq n < 4$

List the possible value of *n*.

possible values are [   ]   (2)

What should go in the shaded box?

A) -1, 0, 1, 2, 3

B) 1, 2, 3

C) -1, 1, 2, 3

D) -1, 0, 1, 2, 3, 4

Correct Answer: A B C D

Explanation:

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What is the solution to this linear inequality?

$$x - 3 < 2$$

A. $x = 5$ B. $x < 5$

C. $x > 5$ D. $x < -1$

Correct Answer: A B C D

Explanation:

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What is the solution to this linear inequality?

$$4x - 3 > 5$$

A. $x > 32$ B. $x > \frac{1}{2}$

C. $x > 2$ D. $x > 8$

Correct Answer: A B C D

Explanation:

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What is the solution to this linear inequality?

$$6x + 1 < 4x - 7$$

A. $x < -4$ B. $x < -3$

C. $x > -3$ D. $x > -4$

Correct Answer: A B C D

Explanation:

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What is the solution to this linear inequality?

$$5 - 2x < 7$$

A. $x > 1$ B. $x < 1$

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

Correct Answer: A B C D

Explanation:

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What is the solution to this linear inequality?

$$6 - x < 2x$$

A $x < 6$ **B** $x > 6$

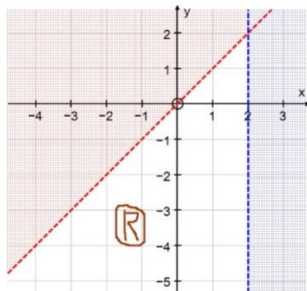**C** $x > 2$ **D** $x < 2$

Correct Answer: A B C D

Explanation:

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Which set of inequalities describes the blank region marked R?

A) $y > x, x < 2$

B) $x < y, x > 2$

C) $y < x, x < 2$

D) $y < x, y < 2$

Designed using: **Autograph**

Correct Answer: A B C D

Explanation:

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What is the solution to $(x + 2)(x - 1) > 0?$
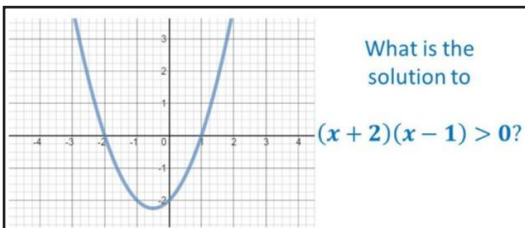
A $x < -2 \; or \; x > 1$ **B** $-2 < x < 1$

C $x < -2 \; and \; x > 1$ **D** $-2 > x > 1$

Correct Answer: A B C D

Explanation:

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What is the solution to $(x + 1)(x - 3) < 0?$
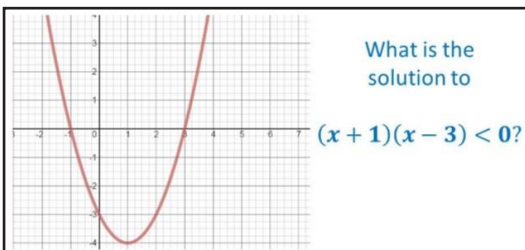
A $x < -1 \; and \; x > 3$ **B** $x < -1 \; or \; x > 3$

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

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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