Name

Polynomial Inequalities - Three Factors - Inequality Validity Chart

1 Which chart correctly shows the intervals where this inequality is valid?

$$(x+4)(x+2)x > 0$$

A

Interval	Valid
(-?, -4)	Yes
(-4, -3)	No
(-3, -2)	Yes
(-2, 0)	No
(0, ?)	Yes

B

Interval	Valid
(-?, -4)	No
(-4, -2)	Yes
(-2, 0)	No
(0, ?)	Yes

C

Interval	Valid
(-?, -4)	Yes
(-4, -2)	No
(-2, 0)	Yes
(0, ?)	No

D

Interval	Valid
(-?, -4)	Yes
(-4, -2)	No
(-2, -1)	Yes
(-1, 0)	No
(0, ?)	Yes

2 Which chart correctly shows the intervals where this inequality is valid?

$$(x+2)x(x-3) < 0$$

A

Interval	Valid
(-?, -3)	No
(-3, -2)	Yes
(-2, 0)	No
(0, 3)	Yes
(3, ?)	No

B

Interval	Valid
(-?, -2)	No
(-2, 0)	Yes
(0, 3)	No
(3, ?)	Yes

C

Interval	Valid
(-?, -2)	Yes
(-2, 0)	No
(0, 3)	Yes
(3, ?)	No

D

Interval	Valid
(-?, -4)	No
(-4, -2)	Yes
(-2, 0)	No
(0, 3)	Yes
(3, ?)	No

3 Which chart correctly shows the intervals where this inequality is valid?

$$(x+4)(x+2)(x-4) > 0$$

A

Interval	Valid
(-?, -4)	Yes
(-4, -2)	No
(-2, 4)	Yes
(4, ?)	No

B

Interval	Valid
(-?, -4)	Yes
(-4, -2)	No
(-2, -1)	Yes
(-1, 4)	No
(4, ?)	Yes

C

Interval	Valid
(-?, -4)	Yes
(-4, -3)	No
(-3, -2)	Yes
(-2, 4)	No
(4, ?)	Yes

D

Interval	Valid
(-?, -4)	No
(-4, -2)	Yes
(-2, 4)	No
(4, ?)	Yes

4 Which chart correctly shows the intervals where this inequality is valid?

$$(x+4)(x-2)(x-4) < 0$$

A

Interval	Valid
(-?, -4)	No
(-4, -3)	Yes
(-3, 2)	No
(2, 4)	Yes
(4, ?)	No

B

Interval	Valid
(-?, -4)	Yes
(-4, 2)	No
(2, 4)	Yes
(4, ?)	No

C

Interval	Valid
(-?, -4)	No
(-4, 2)	Yes
(2, 4)	No
(4, ?)	Yes

D

Interval	Valid
(-?, -4)	No
(-4, -2)	Yes
(-2, 2)	No
(2, 4)	Yes
(4, ?)	No

5 Which chart correctly shows the intervals where this inequality is valid?

$$(x+4)(x+1)(x-2) < 0$$

A

Interval	Valid
(-?, -4)	No
(-4, -3)	Yes
(-3, -1)	No
(-1, 2)	Yes
(2, ?)	No

B

Interval	Valid
(-?, -4)	No
(-4, -1)	Yes
(-1, 2)	No
(2, ?)	Yes

C

Interval	Valid
(-?, -4)	No
(-4, -2)	Yes
(-2, -1)	No
(-1, 2)	Yes
(2, ?)	No

D

Interval	Valid
(-?, -4)	Yes
(-4, -1)	No
(-1, 2)	Yes
(2, ?)	No

6 Which chart correctly shows the intervals where this inequality is valid?

$$(x+3)(x-1)(x-2) < 0$$

A

Interval	Valid
(-?, -3)	No
(-3, -2)	Yes
(-2, 1)	No
(1, 2)	Yes
(2, ?)	No

B

Interval	Valid
(-?, -3)	No
(-3, 1)	Yes
(1, 2)	No
(2, ?)	Yes

C

Interval	Valid
(-?, -3)	Yes
(-3, 1)	No
(1, 2)	Yes
(2, ?)	No

D

Interval	Valid
(-?, -4)	No
(-4, -3)	Yes
(-3, 1)	No
(1, 2)	Yes
(2, ?)	No

7 Which chart correctly shows the intervals where this inequality is valid?

$$x(x-1)(x-4) < 0$$

A

Interval	Valid
(-?, -4)	No
(-4, 0)	Yes
(0, 1)	No
(1, 4)	Yes
(4, ?)	No

B

Interval	Valid
(-?, 0)	No
(0, 1)	Yes
(1, 4)	No
(4, ?)	Yes

C

Interval	Valid
(-?, 0)	Yes
(0, 1)	No
(1, 4)	Yes
(4, ?)	No

D

Interval	Valid
(-?, -3)	No
(-3, 0)	Yes
(0, 1)	No
(1, 4)	Yes
(4, ?)	No

8 Which chart correctly shows the intervals where this inequality is valid?

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

A

Interval	Valid
(-?, -3)	Yes
(-3, 0)	No
(0, 1)	Yes
(1, 3)	No
(3, ?)	Yes

B

Interval	Valid
(-?, 0)	Yes
(0, 1)	No
(1, 3)	Yes
(3, ?)	No

C

Interval	Valid
(-?, -4)	Yes
(-4, 0)	No
(0, 1)	Yes
(1, 3)	No
(3, ?)	Yes

D

Interval	Valid
(-?, 0)	No
(0, 1)	Yes
(1, 3)	No
(3, ?)	Yes