Name

Polynomial Inequalities - Three Factors with Multiplicity - Sign Chart

1 Which sign chart correctly shows the sign of this polynomial on each interval?

$$(x-1)^3(x-2)^5(x-3)^4$$

A

Interval	Sign
(-?, 1)	-
(1, 2)	+
(2, ?)	-

B

Interval	Sign
(-?, 1)	-
(1, 2)	+
(2, 3)	-
(3, ?)	+

C

Interval	Sign
(-?, 1)	+
(1, 2)	-
(2, ?)	+

D

Interval	Sign
(-?, -4)	-
(-4, 1)	+
(1, 2)	-
(2, ?)	+

2 Which sign chart correctly shows the sign of this polynomial on each interval?

$$(x+3)^4(x-1)^4(x-3)$$

A

Interval	Sign
(-?, 3)	-
(3, ?)	+

B

Interval	Sign
(-?, 1)	+
(1, 3)	-
(3, ?)	+

C

Interval	Sign
(-?, -3)	+
(-3, 3)	-
(3, ?)	+

D

Interval	Sign
(-?, 3)	+
(3, ?)	-

3 Which sign chart correctly shows the sign of this polynomial on each interval?

$$(x+4)^2(x+3)^5(x-1)^5$$

A

Interval	Sign
(-?, -4)	-
(-4, -3)	+
(-3, 1)	-
(1, ?)	+

B

Interval	Sign
(-?, -3)	+
(-3, 1)	-
(1, ?)	+

C

Interval	Sign
(-?, -3)	-
(-3, -2)	+
(-2, 1)	-
(1, ?)	+

D

Interval	Sign
(-?, -3)	-
(-3, 1)	+
(1, ?)	-

4 Which sign chart correctly shows the sign of this polynomial on each interval?

$$(x+4)^2(x-1)^3(x-3)^4$$

A

Interval	Sign
(-?, -4)	+
(-4, 1)	-
(1, ?)	+

B

Interval	Sign
(-?, 1)	-
(1, ?)	+

C

Interval	Sign
(-?, 1)	+
(1, 3)	-
(3, ?)	+

D

Interval	Sign
(-?, 1)	+
(1, ?)	-

5 Which sign chart correctly shows the sign of this polynomial on each interval?

$$(x+3)^2(x+2)^4(x+1)^5$$

A

Interval	Sign
(-?, -2)	+
(-2, -1)	-
(-1, ?)	+

B

Interval	Sign
(-?, -1)	-
(-1, ?)	+

C

Interval	Sign
(-?, -3)	+
(-3, -1)	-
(-1, ?)	+

D

Interval	Sign
(-?, -1)	+
(-1, ?)	-

6 Which sign chart correctly shows the sign of this polynomial on each interval?

$$(x+1)^2x^3(x-2)^5$$

A

Interval	Sign
(-?, 0)	+
(0, 2)	-
(2, ?)	+

B

Interval	Sign
(-?, -4)	-
(-4, 0)	+
(0, 2)	-
(2, ?)	+

C

Interval	Sign
(-?, -1)	-
(-1, 0)	+
(0, 2)	-
(2, ?)	+

D

Interval	Sign
(-?, 0)	-
(0, 2)	+
(2, ?)	-

7 Which sign chart correctly shows the sign of this polynomial on each interval?

$$(x+4)^3(x+3)^5(x-3)^2$$

A

Interval	Sign
(-?, -4)	-
(-4, -3)	+
(-3, -2)	-
(-2, ?)	+

B

Interval	Sign
(-?, -4)	-
(-4, -3)	+
(-3, 3)	-
(3, ?)	+

C

Interval	Sign
(-?, -4)	+
(-4, -3)	-
(-3, ?)	+

D

Interval	Sign
(-?, -4)	-
(-4, -3)	+
(-3, ?)	-

8 Which sign chart correctly shows the sign of this polynomial on each interval?

$$(x+4)^3(x+1)^4(x-2)^2$$

A

Interval	Sign
(-?, -4)	-
(-4, ?)	+

B

Interval	Sign
(-?, -4)	+
(-4, ?)	-

C

Interval	Sign
(-?, -4)	+
(-4, -1)	-
(-1, ?)	+

D

Interval	Sign
(-?, -4)	+
(-4, 2)	-
(2, ?)	+