



Polynomial Inequalities - Two Factors with Multiplicity - Sign Chart



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

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

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

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

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

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

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

$$(x + 2)x^4$$

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Interval	Sign
(-?, 0)	+
(0, 3)	-
(3, ?)	+

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

$$(x - 2)(x - 4)^2$$

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

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

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

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