



Polynomial Inequalities - Expanded Quadratic - Sign Chart

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

$$x^2 + 5x + 4$$

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

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

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

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

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

$$x^2 - 5x + 6$$

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

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

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

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

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

$$x^2 + 6x + 8$$

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

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

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

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

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

$$x^2 + 7x + 12$$

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

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

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

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

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

$$x^2 - 3x - 4$$

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

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

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

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

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

$$x^2 - 7x + 12$$

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

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

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

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

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

$$x^2 - 3x + 2$$

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

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

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

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

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

$$x^2 - x - 12$$

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

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

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

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