



## Polynomial Inequalities - Expanded Quadratic - Sign in an Interval

1

Is this polynomial positive or negative on the interval  $(-\infty, -4)$ ?

$$x^2 + x - 12$$

A

Negative

B

Positive

2

Is this polynomial positive or negative on the interval  $(-\infty, -3)$ ?

$$x^2 + 4x + 3$$

A

Negative

B

Positive

3

Is this polynomial positive or negative on the interval  $(-2, \infty)$ ?

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

A

Negative

B

Positive

4

Is this polynomial positive or negative on the interval  $(-4, 4)$ ?

$$x^2 - 16$$

A

Positive

B

Negative

5

Is this polynomial positive or negative on the interval  $(-1, 2)$ ?

$$x^2 - x - 2$$

A

Negative

B

Positive

6

Is this polynomial positive or negative on the interval  $(0, 2)$ ?

$$x^2 - 2x$$

A

Negative

B

Positive

7

Is this polynomial positive or negative on the interval  $(-\infty, -2)$ ?

$$x^2 - x - 6$$

A

Negative

B

Positive

8

Is this polynomial positive or negative on the interval  $(-\infty, -2)$ ?

$$x^2 + x - 2$$

A

Negative

B

Positive