



## Polynomial Inequalities - Factored Quadratic - Sign Change at a Point

1 Does the sign of this polynomial change at  $x = 1$ ?

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

A

B

Yes

No

2 Does the sign of this polynomial change at  $x = -4$ ?

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

A

B

No

Yes

3 Does the sign of this polynomial change at  $x = 4$ ?

$$x(x - 4)$$

A

B

Yes

No

4 Does the sign of this polynomial change at  $x = 2$ ?

$$(x + 2)(x - 2)$$

A

B

Yes

No

5 Does the sign of this polynomial change at  $x = 4$ ?

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

A

B

No

Yes

6 Does the sign of this polynomial change at  $x = -4$ ?

$$(x + 4)(x - 4)$$

A

B

Yes

No

7 Does the sign of this polynomial change at  $x = -1$ ?

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

A

B

Yes

No

8 Does the sign of this polynomial change at  $x = -4$ ?

$$(x + 2)(x + 1)$$

A

B

Yes

No