Name

Polynomial Inequalities - Three Factors with Multiplicity - Sign in an Interval

1 Is this polynomial positive or negative on the interval (4, ∞)?

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

A	B
Negative	Positive

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

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

A	B
Negative	Positive

3 Is this polynomial positive or negative on the interval (2, ∞)?

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

A	B
Negative	Positive

4 Is this polynomial positive or negative on the interval (-∞, 1)?

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

A	B
Positive	Negative

5 Is this polynomial positive or negative on the interval (-∞, -1)?

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

A	B
Negative	Positive

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

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

A	B
Positive	Negative

7 Is this polynomial positive or negative on the interval (-2, 4)?

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

A	B
Negative	Positive

8 Is this polynomial positive or negative on the interval (0, ∞)?

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

A	B
Positive	Negative