



Rational Function Inequalities - Three Factors with Multiplicity over Binomial - Sign in an Interval

1

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

$$\frac{(x + 2)^2(x + 1)^2(x - 3)^5}{x}$$

 x

A

Negative

B

Positive

2

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

$$\frac{(x + 1)^2 x^2 (x - 1)^3}{x + 2}$$

 $x + 2$

A

Positive

B

Negative

3

Is this rational function positive or negative on the interval $(1, 2)$?

$$\frac{(x + 2)^2(x - 2)(x - 4)^2}{x - 1}$$

 $x - 1$

A

Negative

B

Positive

4

Is this rational function positive or negative on the interval $(3, 4)$?

$$\frac{(x + 3)^2(x - 2)^2(x - 4)}{x - 3}$$

 $x - 3$

A

Positive

B

Negative

5

Is this rational function positive or negative on the interval $(2, 4)$?

$$\frac{(x + 1)^2(x - 2)(x - 3)^2}{x - 4}$$

 $x - 4$

A

Negative

B

Positive

6

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

$$\frac{(x + 2)^3 x^4 (x - 1)^3}{x + 3}$$

 $x + 3$

A

Negative

B

Positive

7

Is this rational function positive or negative on the interval $(-3, 2)$?

$$\frac{(x + 4)^2(x + 3)(x - 1)^2}{x - 2}$$

 $x - 2$

A

Positive

B

Negative

8

Is this rational function positive or negative on the interval $(-\infty, 1)$?

$$\frac{(x + 3)^2(x + 2)^4(x - 4)}{x - 1}$$

 $x - 1$

A

Negative

B

Positive