



Rational Function Inequalities - Three Factors over Binomial - Sign Chart

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

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

A		B		C		D	
Interval	Sign	Interval	Sign	Interval	Sign	Interval	Sign
(-7, -4)	+	(-7, -4)	-	(-7, -4)	-	(-7, -4)	-
(-4, 1)	-	(-4, 1)	+	(-4, 1)	+	(-4, 1)	+
(1, 7)	+	(1, 3)	-	(-3, 1)	-	(-4, 1)	+
		(3, 7)	+	(1, 7)	+	(1, 7)	-

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

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

A		B		C		D	
Interval	Sign	Interval	Sign	Interval	Sign	Interval	Sign
(-7, -4)	+	(-7, -4)	-	(-7, -4)	-	(-7, -4)	-
(-4, -1)	-	(-4, -2)	+	(-4, -1)	+	(-4, -3)	+
(-1, 2)	+	(-2, -1)	-	(-1, 2)	-	(-3, -1)	-
(2, 4)	-	(-1, 2)	+	(2, 4)	+	(-1, 2)	+
(4, 7)	+	(2, 4)	-	(4, 7)	-	(2, 4)	-
		(4, 7)	+			(4, 7)	+

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

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

A		B		C		D	
Interval	Sign	Interval	Sign	Interval	Sign	Interval	Sign
(-7, -3)	-	(-7, -4)	-	(-7, -3)	+	(-7, -3)	-
(-3, -2)	+	(-4, -3)	+	(-3, -2)	-	(-3, -2)	+
(-2, -1)	-	(-3, -2)	-	(-2, 3)	+	(-2, 3)	-
(-1, 3)	+	(-2, 3)	+	(3, 4)	-	(3, 4)	+
(3, 4)	-	(3, 4)	-	(4, 7)	+	(4, 7)	-
(4, 7)	+	(4, 7)	+				

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

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

A		B		C		D	
Interval	Sign	Interval	Sign	Interval	Sign	Interval	Sign
(-7, -2)	+	(-7, -3)	-	(-7, -2)	-	(-7, -4)	-
(-2, -1)	-	(-3, -2)	+	(-2, -1)	+	(-4, -2)	+
(-1, 0)	+	(-2, -1)	-	(-1, 0)	-	(-2, -1)	-
(0, 4)	-	(-1, 0)	+	(0, 4)	+	(-1, 0)	+
(4, 7)	+	(0, 4)	-	(4, 7)	-	(0, 4)	-
		(4, 7)	+			(4, 7)	+

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

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

A		B		C		D	
Interval	Sign	Interval	Sign	Interval	Sign	Interval	Sign
(-7, -3)	+	(-7, -4)	-	(-7, -3)	-	(-7, -3)	-
(-3, 3)	-	(-4, -3)	+	(-3, 1)	+	(-3, 3)	+
(3, 7)	+	(-3, 3)	-	(1, 3)	-	(3, 7)	-
		(3, 7)	+				

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

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

A		B		C		D	
Interval	Sign	Interval	Sign	Interval	Sign	Interval	Sign
(-7, -4)	-	(-7, -3)	-	(-7, -3)	-	(-7, -3)	+
(-4, -3)	+	(-3, 0)	+	(-3, 0)	+	(-3, 0)	-
(-3, 0)	-	(0, 1)	-	(0, 7)	-	(0, 7)	+
(0, 7)	+	(1, 7)	+				

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

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

A		B		C		D	
Interval	Sign	Interval	Sign	Interval	Sign	Interval	Sign
(-7, -3)	-	(-7, -2)	-	(-7, -4)	-	(-7, -2)	+
(-3, -2)	+	(-2, 4)	+	(-4, -2)	+	(-2, 4)	-
(-2, 4)	-	(4, 7)	-	(-2, 4)	-	(4, 7)	+
(4, 7)	+			(4, 7)	+		

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

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

A		B		C		D	
Interval	Sign	Interval	Sign	Interval	Sign	Interval	Sign
(-7, -1)	-	(-7, -4)	-	(-7, -1)	+	(-7, -1)	-
(-1, 0)	+	(-4, -1)	+	(-1, 0)	-	(-1, 0)	+
(0, 7)	-	(-1, 0)	-	(0, 7)	+	(0, 4)	-
		(0, 7)	+			(4, 7)	+