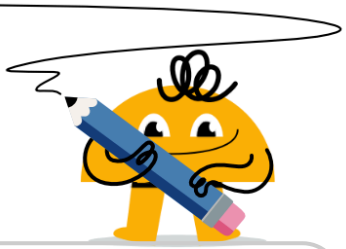
Name

Rational Function Inequalities - Three Factors over Binomial - Intervals



1 On which set of open intervals does this rational function keep a constant sign? $\frac{(x+3)(x+2)(x-3)}{x+3}$

A $(-\infty,-4)\cup(-4,-2)\cup(-2,3)\cup(3,\infty)$

B $(-\infty,-2)\cup(-2,-1)\cup(-1,3)\cup(3,\infty)$

C $(-\infty,-3)\cup(-3,-2)\cup(-2,3)\cup(3,\infty)$

D $(-\infty,-2)\cup(-2,3)\cup(3,\infty)$

2 On which set of open intervals does this rational function keep a constant sign? $\frac{(x+2)x(x-3)}{x-2}$

A $(-\infty,-3)\cup(-3,-2)\cup(-2,0)\cup(0,2)\cup(2,3)\cup(3,\infty)$

B $(-\infty,-2)\cup(-2,-1)\cup(-1,0)\cup(0,2)\cup(2,3)\cup(3,\infty)$

C $(-\infty,-4)\cup(-4,-2)\cup(-2,0)\cup(0,2)\cup(2,3)\cup(3,\infty)$

D $(-\infty,-2)\cup(-2,0)\cup(0,2)\cup(2,3)\cup(3,\infty)$

3 On which set of open intervals does this rational function keep a constant sign? $\frac{(x+2)(x-2)(x-4)}{x-2}$

A $(-\infty,-3)\cup(-3,-2)\cup(-2,4)\cup(4,\infty)$

B $(-\infty,-2)\cup(-2,2)\cup(2,4)\cup(4,\infty)$

C $(-\infty,-2)\cup(-2,4)\cup(4,\infty)$

D $(-\infty,-4)\cup(-4,-2)\cup(-2,4)\cup(4,\infty)$

4 On which set of open intervals does this rational function keep a constant sign? $\frac{(x+3)(x+2)(x-4)}{x+2}$

A $(-\infty,-3)\cup(-3,4)\cup(4,\infty)$

B $(-\infty,-4)\cup(-4,-3)\cup(-3,4)\cup(4,\infty)$

C $(-\infty,-3)\cup(-3,-2)\cup(-2,4)\cup(4,\infty)$

D $(-\infty,-3)\cup(-3,-1)\cup(-1,4)\cup(4,\infty)$

5 On which set of open intervals does this rational function keep a constant sign? $\frac{(x+4)(x+3)(x-3)}{x+4}$

A $(-\infty,-4)\cup(-4,-3)\cup(-3,3)\cup(3,\infty)$

B $(-\infty,-3)\cup(-3,3)\cup(3,\infty)$

C $(-\infty,-3)\cup(-3,-2)\cup(-2,3)\cup(3,\infty)$

D $(-\infty,-3)\cup(-3,-1)\cup(-1,3)\cup(3,\infty)$

6 On which set of open intervals does this rational function keep a constant sign? $\frac{(x+4)(x-3)(x-4)}{x-3}$

A $(-\infty,-4)\cup(-4,-3)\cup(-3,4)\cup(4,\infty)$

B $(-\infty,-4)\cup(-4,4)\cup(4,\infty)$

C $(-\infty,-4)\cup(-4,3)\cup(3,4)\cup(4,\infty)$

D $(-\infty,-4)\cup(-4,-2)\cup(-2,4)\cup(4,\infty)$

7 On which set of open intervals does this rational function keep a constant sign? $\frac{(x+2)x(x-2)}{x-3}$

A $(-\infty,-3)\cup(-3,-2)\cup(-2,0)\cup(0,2)\cup(2,3)\cup(3,\infty)$

B $(-\infty,-2)\cup(-2,0)\cup(0,2)\cup(2,3)\cup(3,\infty)$

C $(-\infty,-2)\cup(-2,-1)\cup(-1,0)\cup(0,2)\cup(2,3)\cup(3,\infty)$

D $(-\infty,-4)\cup(-4,-2)\cup(-2,0)\cup(0,2)\cup(2,3)\cup(3,\infty)$

8 On which set of open intervals does this rational function keep a constant sign? $\frac{(x+4)(x-1)(x-4)}{x-3}$

A $(-\infty,-4)\cup(-4,-1)\cup(-1,1)\cup(1,3)\cup(3,4)\cup(4,\infty)$

B $(-\infty,-4)\cup(-4,1)\cup(1,3)\cup(3,4)\cup(4,\infty)$

C $(-\infty,-4)\cup(-4,-2)\cup(-2,1)\cup(1,3)\cup(3,4)\cup(4,\infty)$

D $(-\infty,-4)\cup(-4,-3)\cup(-3,1)\cup(1,3)\cup(3,4)\cup(4,\infty)$