

WORK SHEET 2 FOR GRADE 11 ON RATIONAL FUNCTION

1983/10. A simplification of $\frac{\frac{x+1}{x-1} - \frac{x-1}{x+1}}{\frac{x}{x^2-1}}$ gives : A) x B) 0 C) 4 D) 4x E) None of the above

1983/33. Which of the following is NOT true about the graph of $f(x) = \frac{x^3 - x^2 - 12x}{x^2 - x - 2}$?
 A) The y-intercept is 0. D) The x-intercepts are $-3, 0$ and 4
 B) It does not have a horizontal asymptote E) None of the above
 C) $y = x$ is an asymptote of f .

1988/8. A simplification of $\frac{x}{x-y} + \frac{y}{x+y} - \frac{2}{\frac{x}{y} - \frac{y}{x}}$ is A) 2 B) $\frac{x^2 - y^2 - 4xy}{x^2 - y^2}$

1989/9. For $a \neq 0$ and $a \neq 1$, $\frac{a}{1 - \frac{1}{1-a}} - \frac{a^2}{a - \frac{1}{1-a}}$ is equal to which of the following ?
 A) 0 B) 1 C) -1 D) A E) None of the above

1989/20. The solution set of the equation $\frac{2x}{x+2} + \frac{4}{x-2} = \frac{2x}{x-2}$ is:
 A) (-1) B) $\emptyset$ C) $\{1, -1\}$ D) $\{2\}$ E) None of the above

1991/7. The solution set of the equation $\frac{1}{1 - \frac{6}{x}} = \frac{1}{x-6}$ is : A. $\{1\}$ B) $\{1, 6\}$ C) $\{6\}$ D) $\emptyset$

1991/21. Which of the following expressions defines a rational function?

A) $\sqrt{\frac{x+1}{x-1}}$ B) $\frac{1}{\log_2 x}$ C) $2x^{-3} + 3x^{-2} + 5$ D) $\frac{3^x + 1}{x^2 + 1}$

1991/22. Which of the following is NOT true about $f(x) = x + \frac{1-x}{x^2+1}$

A) The x-intercept is -1 C) $f(x < x)$ for $x < 1$
 B) The graph of $f(x)$ intersects with its oblique asymptote at $(1, 1)$. D) The graph of $f(x)$ lies below the line $y = x$ for $x > 1$.
 1992/5. Which of the following is NOT true about f ?

A) The x-intercept is 2 B) 1 is in the range of f C) The y-intercept is 2 D) The line $y = 1$ is a horizontal asymptote

1992/6. If $h(x) = f\left(\frac{1}{x}\right)$, then which of the following is NOT true ?

A) Domain of h is $\mathbb{R} \setminus \{0, 1\}$ C) The line $x = 0$ is a vertical asymptote to the graph of h
 B) $(x) = \frac{1-2x}{1-x}$ for $x \neq 0$ and $x \neq 1$ D) $\left(\frac{1}{x}\right) = f(x)$ for $x \neq 0$ and $x \neq 1$

1992/20. Which of the following is the solution set of the equation $\frac{x^2 - 8x - 20}{x^2 + 15x + 26} = \frac{x}{x+3} - \frac{10}{x+13}$?
 A) $(-\infty, \infty)$ B) $(-\infty, \infty) \setminus \{-2, -3, -13\}$ C) $(-\infty, \infty) \setminus \{-2, -13\}$ D) None of the above.

1993/24. What are the values of x which satisfy the equation $\frac{x+3}{x+2} + \frac{1}{x-2} = 0$?

A) $-1 \pm \sqrt{6}$ B) $-1 \pm \sqrt{5}$ C) 3 or -1 D) 1 or -3

1994/2. Which of the following is the solution set of the inequality $\frac{x^2+1}{x^2-1} > 0$?

A) $\{x: x < -1 \text{ or } x > 1\}$ B) $x: -1 < x < 1$ C) $\mathbb{R} \setminus \{-1, 1\}$ D) $\mathbb{R}$

1994/12. Let $f(x) = x + 1 + \frac{x-1}{x}$. Then which of the following is NOT true ?

A) $-1 + \sqrt{2}$ is an x-intercept of the graph of the function. C) The graph of the function f does not have a y-intercept.
 B) $-1 - \sqrt{2}$ is an x-intercept of the graph of the function. D) The line $y = x + 1$ is an oblique asymptote to the graph of f .

1994/16. Let $(x) = \frac{4}{(x-5)^2}$, then which of the following is NOT true ?

A) f is an even function C) $\{f(x): f(x) > 0\}$ is the range of f
 B) The line $x = 5$ is a vertical asymptote of the graph. D) The graph of f is symmetric with respect to the line $x = 5$.

1994/18. The solution set of the inequality $\left| \frac{x^2 + 2x + 1}{x^2 - 4} \right| > 0$ is

A) $\{x: x \text{ is real and } x \neq -2, -1, 2\}$ C) $\{x: x \text{ is real and } x > 0\}$
 B) The set of all real numbers. D) $\{x: x \text{ is real and } x \neq -2, 2\}$

1994/37. If $x = 2$ and $y = \frac{1}{3}$, then $\frac{\frac{x}{1-\frac{y}{x}} - \frac{y}{1-\frac{3y}{x}}}{\frac{1}{y} - \frac{3y}{x}}$ is equal to : A) -1 B) $-\frac{15}{2}$ C) $-\frac{6}{5}$ D) $\frac{6}{5}$

1995/3. Which of the following is the solution set of the equation $\frac{x+1}{2-2x^2} + \frac{6}{x+1} = \frac{2x-1}{x^2-1} - \frac{1}{2-2x}$?

A) $\emptyset$

B) $\left\{\frac{8}{7}\right\}$

C) $\left\{\frac{5}{3}\right\}$

D) $\{2\}$

1995/13. If $f(x) = \frac{16-x^4}{x^3-8}$, which of the following is true about the function?

A) $x = \sqrt{2}$ is a vertical asymptote.

C) $x = -2$ is a vertical asymptote.

B) $y = x$ is an oblique asymptote

D) $y = -x$ is an oblique asymptote

1995/46. The solution set of $\frac{x^2-6x}{x-12} > 1$ is: A) $(3,4)$ B) $(12, \infty)$ C) $(3,4] \cup (12, \infty)$ D) $(3,4) \cup (12, \infty)$

1998/6. Which of the following is true about $f(x) = \frac{x}{x-1} - \frac{1}{x+1}$?

A) The domain of f is $\mathbb{R} \setminus \{1\}$

C) As x increases the value of f gets decreasing

B) The range of f is $\mathbb{R}$

D) $y = 1$ is a horizontal asymptote to the graph of f

1998/12. The expression $\frac{x}{x^3-1} \div \left(2 - \frac{1}{1 + \frac{1}{x-2}}\right)$ is equal to

A) $\frac{1}{x^2+x+1}, x \neq 1, 2$

B) $\frac{x-4}{x^2+x+1}, x \neq 1, 2$

C) $\frac{1}{x^2+x+1}, x \neq 0, 1, 2$

D) $\frac{1}{x^2+x-1}, x \neq 0, 1, 2$

1998/20. The function $g(x) = \frac{x^2-x+1}{x+1}$ is decreasing on

A) $[-3, 1]$

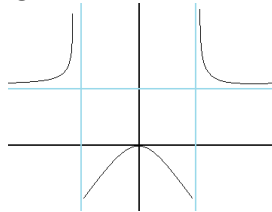
B) $[-3, -1] \cup (-1, 1]$

C) $(-\infty, -3] \cup [1, \infty)$

D) $(-1, 1]$

1999/6. The respective values of A and B so that $\frac{x-4}{x^3+2x} = \frac{A}{x} + \frac{Bx+C}{x^2+2}$ are: A) $-2, 2$ B) $2, -2$ C) $2, 1$ D) $2, -1$

1999/7. Which of the following functions could most likely be sketched as in the figure shown below?



A) $g(x) = \frac{x^2}{1-x^2}$

B) $g(x) = \frac{1-x}{1-x^2}$

C) $g(x) = \frac{x^2}{x^2-1}$

D) $g(x) = \frac{x}{x^2-1}$

1999/8. The simplified form of the expression $\left(\frac{x+7}{x^2-x-6}\right) \div \left(\frac{2}{x-3} + \frac{-1}{x+2}\right)$ is equal to:

A) $\frac{-1}{x^2-x-6}$

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

C) 1

D) $\frac{(x+7)(x-3)(x+2)}{x^2-x-6}$

1999/10. Which of the following is the solution set of the inequality $\frac{1}{x+2} - \frac{1}{x} \geq 2$

A) $(0, \infty)$

B) $(-2, 0)$

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

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

2000/9. What is the solution set of the inequality $\frac{2x}{x+1} < 5$?

A) $\left(-\frac{5}{3}, \infty\right)$

B) $\left(-\infty, -\frac{5}{3}\right) \cup (-1, \infty)$

C) $(-\infty, -2) \cup \left(\frac{5}{2}, \infty\right)$

D) $\emptyset$

2000/11. What are the values of a and b which make the mathematical statement $\frac{x+1}{x^2-9} = \frac{a}{x-3} + \frac{b}{x+3}$ true?

A) $a = 1, b = 0$

B) $a = \frac{1}{3}, b = \frac{3}{5}$

C) $a = \frac{-2}{5}, b = 1$

D) $a = \frac{2}{3}, b = \frac{1}{3}$

2000/13. Which of the following is the domain of the function $f(x) = \frac{(x+1)x^{-2}}{x^2+1}$?

A) $\mathbb{R} \setminus \{1, -1\}$

B) $\mathbb{R} \setminus \{0, -1\}$

C) $\mathbb{R} \setminus \{0\}$

D) $\mathbb{R}$

2001/11. The value of x where the graph of $y = \frac{x^2-1}{x^3}$ crosses its horizontal asymptote is (are)

A) $x = -2$

B) $x = 0$

C) $x = -1$ and $x = 1$

D) $x = -\sqrt{2}$ and $x = \sqrt{2}$

2001/14. Which one of the following represent the solution set for the equation $\frac{1}{x-2} = \frac{3}{x+2} - \frac{6x}{x^2-4}$?

A) $\left\{-\frac{1}{2}, \frac{1}{2}\right\}$

B) $\{-4, 2\}$

C) $\{-2\}$

D) $\emptyset$

2001/27. Which one of the following is the solution set of the inequality $\frac{1}{1-\frac{1}{x}} \leq \frac{x}{x^2-1}$?

A) $(-1, 1)$

B) $[-1, 0) \cup (0, -1]$

C) $(-1, 0) \cup (0, -1)$

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

2002/6. Which of the following is a rational function?

A) $f(x) = \frac{\sqrt{2}x^2 - x + \log 2}{x^4 + x^2 + \pi}$ B) $g(x) = 3x^4 - \sqrt{x^2 + 1} + x$ C) $h(x) = \frac{x^2 - 2x + x}{x^4 + x + 1}$ D) $r(x) = \frac{x^2 + \sin x + 2}{x + 1}$

2002/7. If $p(x) = x - 4$, $q(x) = x^2 + 8$ and $q(x) = x^2 - 2x + 8$, then which of the

following is the most simplified expression of $f(x) = \frac{x}{p(x)} - \frac{q(x)}{r(x)}$

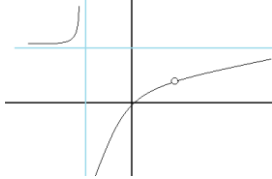
A) $\frac{x}{x-4} - \frac{x^2+8}{x^2-2x-8}$ B) $\frac{8x}{x-4}$ C) $\frac{2}{x+2}$ D) $\frac{2x+8}{x^2-2x-8}$

2002/8. What is the solution set of $1 - \frac{1}{x+2} \leq \frac{-1}{x}$? A) $(-2, 0)$ B) $(0, \infty)$ C) $(-\infty, -2)$ D) $(-\infty, -2) \cup (0, \infty)$

2002/9. Consider an airplane that flies in straight line from Addis to city X in a planned time. If it flies at the speed of 1000 km/hr, it will reach at X 30 minutes before the planned time. On the other hand, if it flies at 900 km/hr it will reach there 20 minutes after the planned time. Which of the following is the distance between Addis Ababa and city X?

A) 8500 km B) 8000 km C) 7500 km D) 7250 km

2002/10. Which of the following function could most likely be sketched as in the figure below ?



A) $f(x) = \frac{2x}{x+1}$ B) $f(x) = \frac{2x(x-1)}{x^2-1}$ C) $f(x) = \frac{2}{x+1}$ D) $f(x) = \frac{2x^2}{x^2-1}$

2003/3. Which one of the following is the domain of $g(x) = x - \frac{x^2+1}{x^4+x}$? A) $\mathbb{R} \setminus \{0\}$ B) $\mathbb{R} \setminus \{-1\}$ C) $\mathbb{R} \setminus \{0, 1\}$ D) $\mathbb{R} \setminus \{-1, 0\}$

2003/4. Which of the following is the simplified form of $\frac{t - \frac{1}{t}}{1 + \frac{1}{1-t}} \div \frac{t^2 - 2t + 1}{t}$, $t \neq 0$ and $t \neq 1$

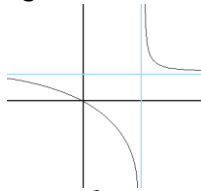
A) $t + 1$ B) $t - 1$ C) $1 - t$ D) $-t - 1$

2003/5. What are the respective value of A, B and C , so that $\frac{x-1}{x^3+x} = \frac{A}{x} + \frac{Bx+C}{x^2+1}$

A) $-1, 1, 1$ B) $-1, 1, 2$ C) $1, -2, 0$ D) $3, 1, 2$

2003/6. What is the solution set of $1 - \frac{5}{x^2+4} = \frac{x-1}{x^2-x} - \frac{1}{x}$? A) $\{1, -1\}$ B) $\{2\}$ C) $\{-1\}$ D) $\{1, 2, -1\}$

2003/9. Which of the following function could most likely be drawn as in the figure below ?



A) $f(x) = \frac{x}{x-2}$ B) $f(x) = \frac{x^2+2x}{x^2-4}$ C) $f(x) = \frac{x+1}{x-2}$ D) $f(x) = \frac{x^3+2x}{x^2-4}$

2003/12. Which of the following is not true about the graph of $g(x) = \frac{x^2-1}{x^2+1}$

A) The range of g is $(-\infty, 1)$ B) g is an even function C) The line $y=1$ is a horizontal asymptote D) As $x \rightarrow -\infty$, $g(x) \rightarrow 1$

2004/4. Which of the following is a simplest form of $\frac{4 - (a-2)^2}{a^4 + 2a^2 + 1} \div \frac{1 - \frac{1}{a^2+1}}{a}$?

A) $\frac{4-a}{a}$ B) $-\frac{a}{a^2+1}$ C) $\frac{-1}{a^2(a^2+1)}$ D) $\frac{4-a}{a^2+1}$

2004/5. If $f(x) = \frac{x-1}{(x-2)^2(x+1)}$, which of the following is true about ?

A) Its graph has an oblique asymptote. C) As $x \rightarrow -1^+$, $f(x) \rightarrow -\infty$
B) The graph of f does not meet its asymptote. D) As $x \rightarrow 2^-$, $f(x) \rightarrow -\infty$

2005/16. Which of the following function has no vertical asymptote ?

A) $f(x) = \ln(x+1)$ B) $f(x) = \frac{x^2+1}{x^3+8}$ C) $f(x) = \frac{x^2-9}{x-3}$ D) $f(x) = \frac{x-1}{x^2-x}$

2005/28. What is the solution set of $\frac{2}{x} - \frac{x-2}{x^2-2x} = 1 - \frac{2x-2}{3x-2}$? A) $\{1, -2\}$ B) $\{1, 2\}$ C) $\{-1\}$ D) $\{1\}$

2006/29. Which one of the following is true ?

A) A polynomial can have infinitely vertical asymptote.
B) The graph of a rational function can never cross its horizontal asymptote.
C) The graph of $f(x) = \frac{3x-1}{x-1}$ has no horizontal asymptote.

D) The graph of $f(x) = \frac{x^3 - x}{x^2 - x}$ has no vertical asymptote.

2006/49. Which one of the following is true about the graph of $f(x) = \frac{x^2 - 1}{x - x^2}$?

- A) $x = 0$ and $x = 1$ are its vertical asymptotes. C) $y = x - 1$ is its oblique asymptote
B) $y = 1$ is its horizontal asymptote. D) It is almost the same the horizontal line $y = 1$ as $x \rightarrow \pm\infty$

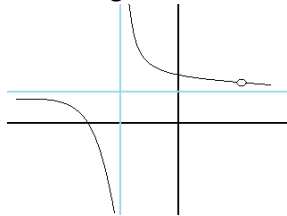
2007/31. The value of x where the graph of the function $y = \frac{x^2 - 1}{x^3}$ crosses its horizontal asymptote is(are)?

- A) $x = 2$ B) $x = -1$ and $x = 1$ C) $x = 0$ D) $x = -\sqrt{2}$ and $x = 1 + \sqrt{2}$

2007/32. If $p(x) = 3x^2$ and $q(x) = x^2 + x$, then what is the solution set of $\frac{p(x)}{3q(x)} - \frac{1}{x} = \frac{1}{q(x)}$?

- A) $\{-1, 2\}$ B) $\{2\}$ C) $\{-3, 2\}$ D) $\{-3\}$

2007/47. Which of the following functions could most likely be drawn as the figure 1 below?



- A) $\frac{x+3}{x+2}$ B) $\frac{x^2 - 2x}{x^2 - 4}$ C) $\frac{-x^2 - x + 6}{x^2 - 4}$ D) $\frac{x^2 + x - 6}{x^2 - 4}$

2008/30. The solution set of the equation $\frac{x^2}{x+3} + \frac{3x}{x^2 + 5x + 6} = \frac{2x}{x+3}$ is A) $\{0, 1\}$ B) $\{-1, 1\}$ C) $\{-1, 0, 1\}$ D) $\{-1, 0\}$

2008/44. For the rational function $f(x) = \frac{x^2 + 5x + 6}{x^2 + 1}$, which of the following is true?

- A) vertical asymptotes are the line $x = -2$ and $x = -3$ C) Horizontal asymptote is $y = 1$
B) Oblique asymptote is $y = 5x - 5$ D) x-intercepts are 2 and 3

2008/2. What is the solution set of $\frac{1 - \frac{1}{x}}{1 - \frac{1}{x^2}} = 3x^2 - \frac{x}{1 + \frac{1}{x}}$? A) $\{-1, \frac{1}{3}\}$ B) $\{\frac{1}{3}\}$ C) $\{3, \frac{1}{3}\}$ D) $\{-\frac{1}{3}\}$

2008/3. Suppose $f(x) = \frac{Q(x)}{x(x^2 - 1)}$ where $Q(x)$ is a function. Which one of the following is necessarily true about the graph of f ?

- A) $x = 0$, $x = 1$ and $x = -1$ are the vertical asymptotes of f .
B) The graph of f does not intersect with its horizontal asymptote.
C) The vertical asymptote of the graph of f is only $x = -1$ if $Q(x) = x^2 - x$
D) The vertical asymptote of the graph of f is only $x = 1$ if $Q(x) = 2x^2$

2008/21. Which one of the following is true about the horizontal asymptote(s) of the graph of $y = \frac{|x| + 2}{x}$?

- A) $y = 2$ is the only horizontal asymptote of the graph.
B) $y = 1$ and $y = -1$ are the horizontal asymptotes of the graph.
C) $y = 2$ and $y = -2$ are the horizontal asymptotes of the graph.
D) $y = 1$ is the only horizontal asymptote of the graph.

2009/14. What is the solution set of $\frac{1}{1 + \frac{1}{x}} - \frac{1}{1 - \frac{1}{x}} = \frac{x + \frac{1}{x}}{x - \frac{1}{x}}$? A) $\emptyset$ B) $\{-1\}$ C) $\{1\}$ D) $\{-1, 1\}$

2009/15. Which one of the following is true about the graph of $f(x) = \frac{x^3 - x}{x^3(x - 1)}$?

- A) The vertical asymptotes of the graph are $x = 0$ and $x = 1$.
B) A horizontal asymptote of the graph is $y = 1$
C) The graph intersects its horizontal asymptote at the point $(-1, 0)$
D) The graph intersects the vertical line $x = 1$ at the point $(1, 2)$

2010/12. What is the partial fraction decomposition of $\frac{x^2 + x + 1}{(x + 2)(x^2 + 1)}$?

- A) $\frac{3}{5(x + 2)} + \frac{2x + 1}{5(x^2 + 1)}$ B) $\frac{5}{3(x + 2)} + \frac{2x + 1}{3(x^2 + 1)}$ C) $\frac{2}{5(x + 2)} + \frac{3x + 1}{5(x^2 + 1)}$ D) $\frac{2}{3(x + 2)} + \frac{2x + 1}{3(x^2 + 1)}$

2010/32. Which one of the following is true about the graph of $f(x) = \frac{2x^3 + 2x^2 + 3x}{x^2 + x}$?

- A) The vertical asymptotes of the graph is only $x = -1$ and its oblique asymptote is $y = 2x$
B) The graph has y-intercept at $(0, 3)$

- C) The graph has at least one x-intercept .
 D) The vertical asymptote of the graph are at $x = 0$ and $x = -1$ but it has no horizontal asymptote
- 2011/20. What is the simplified form of $\frac{a^{-1}b^{-1}}{a^{-3}-b^{-3}}$? A) $\frac{a^2 \cdot b^2}{b^2 - a^2}$ B) $\frac{a^2 \cdot b^2}{b^3 - a^3}$ C) $\frac{a^3 - b^3}{a \cdot b}$ D) $\frac{a^3 - b^3}{a - b}$
- 2011/39. Which one of the following is true about the graph of $f(x) = \frac{x^2 + 5x + 6}{x^2 - 4} + 3$?
 A) The graph has a hole at $x = 2$ C) A horizontal asymptote of the graph is $y = 4$
 B) The vertical asymptote of the graph are $x = -2$ and $x = 2$ D) The graph has y-intercept at $(0, \frac{-3}{2})$
- 2012/5. Let $f(x) = \frac{x^2 - x}{2x^2 - x - 1}$, which of the following is NOT true about f and its graph ?
 A) $x = -\frac{1}{2}$ is a vertical asymptote. C) f is an even function .
 B) The graph of f has a hole at $(1, \frac{1}{3})$ D) $y = \frac{1}{2}$ is a horizontal asymptote .
- 2012/50. Given a rational function $f(x) = \frac{2x + 4}{x - 1}$. Which of the following is NOT true about its graph. The graph has
 A) a horizontal asymptote $y = 2$ C) y-intercept at $(0, -4)$
 B) a vertical asymptote, $x = 1$ D) x-intercept at $(-4, 0)$
- 2013/16. Which of the following is the universal set of the expression $\frac{1}{x^2} + \frac{x+1}{x^2+x}$?
 A) $\mathbb{R} \setminus \{0\}$ B) $\mathbb{R} \setminus \{0, 1\}$ C) $\mathbb{R} \setminus \{0, -1\}$ D) $\mathbb{R} \setminus \{0, 1, -1\}$
- 2013/17. The graph of a rational function is given as in the figure 1 below
 Which of the following is NOT true about the graph ?
 A) $y = 0$ is its horizontal asymptote. C) It is increasing on $(-\infty, 1)$
 B) $x = 1$ is its vertical asymptote . D) It is decreasing on $(1, \infty)$
- 2014/40. Which one of the following is the simplified form of $\frac{4x^4 - 64}{2 - x}$ for $x \neq 0$?
 A) $-4(x - 4)(x^2 + 4)$ B) $-4(x + 4)(x^2 + 4)$ C) $4(x - 2)(x^2 - 4)$ D) $4(x + 4)(x^2 + 4)$
- 2014/58. Which of the following is NOT true about the graph of $f(x) = 5 + \frac{|x|}{x+1}$?
 A) $y = x + 5$ is its oblique asymptote. C) $y = 4$ is its horizontal asymptote.
 B) $y = 6$ is its horizontal asymptote of f D) $x = -1$ is its vertical asymptote of f
- 2014/25. Consider the rational function $(x) = \frac{x^3 - 1}{x^2 + 1}$. Which one of the following is true about the graph of f ?
 A) It is symmetrical about the origin . C) It has no x-intercept .
 B) It is symmetrical about they axis D) Its y-intercept is -1
- 2014/46. What is the solution set of $\frac{2}{x-1} + \frac{4}{x} = \frac{6}{x-2}$? A) $\{\frac{5}{4}\}$ B) $\{\frac{4}{5}\}$ C) $\{\frac{11}{4}\}$ D) $\{\frac{4}{11}\}$
- 2015/11. Which one of the following expressions is equal to $\frac{x-3}{x+1} \div \frac{x+1}{x-1}$?
 A) $\frac{x-1}{x-3}$ B) $\frac{x^2-4x+3}{x^2+2x+1}$ C) $\frac{x^2+2x+1}{x^2-4x+3}$ D) $\frac{x-3}{x-1}$
- 2015/20. Which of the following is the solution set of the equation $\frac{3}{x+1} - \frac{1}{x-1} = \frac{2}{x}$? A) $\{\frac{1}{2}\}$ B) $\{\frac{1}{2}\}$ C) $\{1\}$ D) $\{-1\}$
- 2015/26. If $\frac{x^2 + 14}{(x+2)(x-1)} = \frac{A}{x+2} + \frac{B}{x-1} + \frac{C}{(x-1)^2}$, then what are the values of A , B and C respectively ?
 A) 3, -2, 6 B) 1, -1, 3 C) 2, -1, 5 D) 2, -2, -5
- 2015/27. Which of the following line is true about the intercept and symmetry of the graph of $f(x) = \frac{x^3 - 3x}{x^2 - 6}$?
 A) Its y-intercept is 3 . C) The graph is symmetrical with respect to the origin
 B) The graph is symmetrical with respect to the y-axis D) Its x-intercepts are $\pm\sqrt{6}$