

Unit 7 Quiz 2 Review

Name: _____

Date: _____

1. Solve: $\frac{2(x-7)}{x^2+3x-28} + \frac{x-2}{x-4} = \frac{x+3}{x+7}$

2. Graph the following. Be sure to label important points.

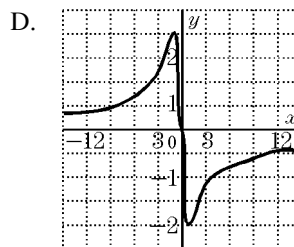
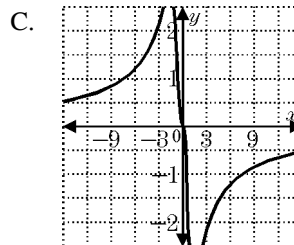
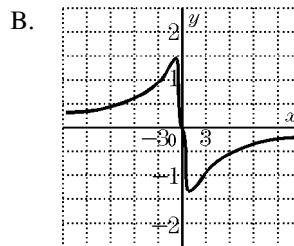
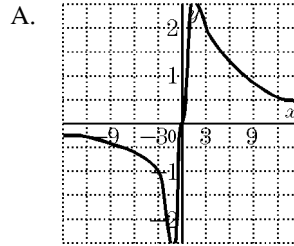
$$g(x) = \frac{1}{x^2 + 4x - 5}$$

3. If Chad can paint 4 rooms in 6 hours and Cierra can do it in 10 hours, then how many hours would it take them working together?

4. Paul can plant his wheat crop in 10 days. His daughter can do it in 15 days. How many days will it take if they work together?

- A. 7.5 B. 7 C. 6 D. 8

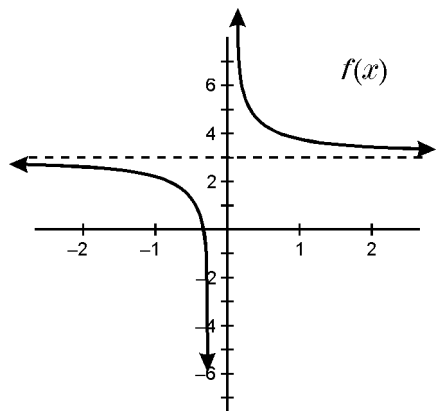
5. Which of the following represents the graph of $y = \frac{-8x}{x^2 + 1}$?



6. Solve for x: $\frac{1}{2x-3} = \frac{5}{4x+1}$

7. Solve: $\frac{2}{x^2 - 1} + \frac{1}{1 - x} = 0$

8. What value(s) are restricted from the range of $f(x)$?



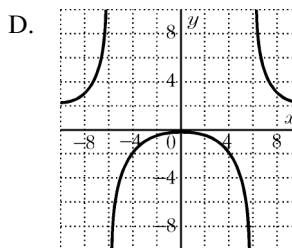
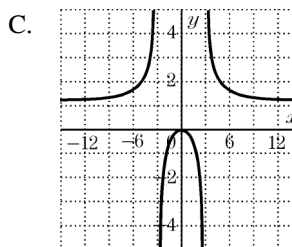
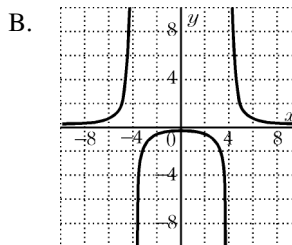
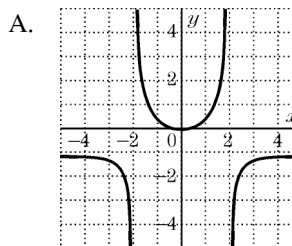
- A. 1 B. 0 C. 3
D. there are no restricted values

9. Which of the following is the equation of an asymptote for the function graphed?

- A. $x = 0$
B. $y = 0$
C. $x = -4$
D. $x = 4$

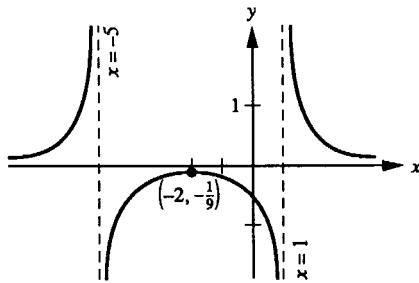


10. Which of the following represents the graph of $y = -\frac{x^2}{x^2 - 4}$?



1.
 Answer: 2
 Objective: A.REI.2

2.
 Answer:



Objective: F.IF.7D

3.
 Answer: 3.75 hours
 Objective: Solving applications of rational equations

4.
 Answer: C

5.
 Answer: C
 Objective: F.IF.7D

6.
 Answer: $2\frac{2}{3}$
 Objective: A.REI.2

7.
 Answer: \emptyset
 Objective: A.REI.2

8.
 Answer: C
 Objective: F.IF.5

9.
 Answer: B
 Objective: F.IF.7D

10.
 Answer: A
 Objective: F.IF.7D