

12-2c Rational Functions

Name _____

Page 883 – 884 #32-44 (skip #36)

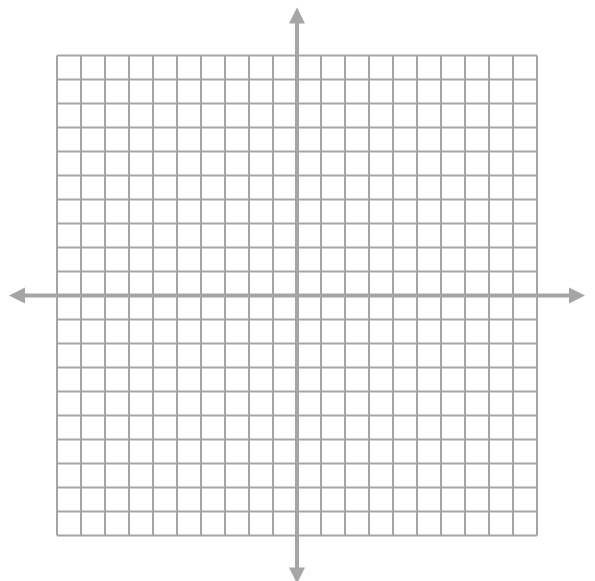
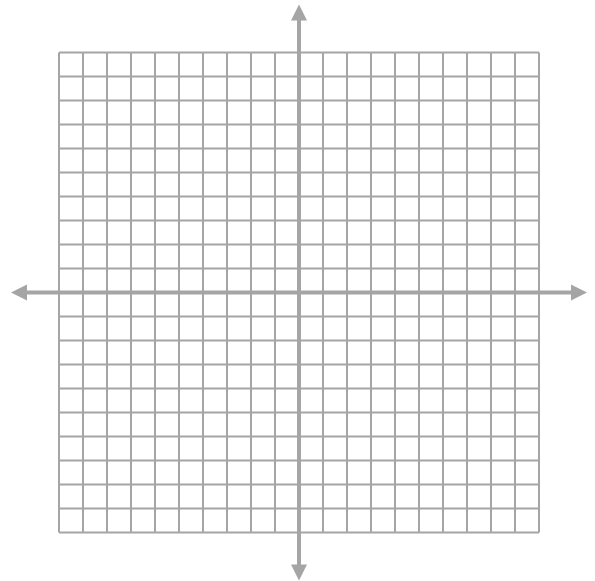
Graph each rational function. Show the asymptotes.

32. $y = \frac{1}{x-2}$

33. $y = \frac{2}{x} + 3$

34. $y = \frac{3}{x+1} + 2$

35. $y = \frac{1}{x-4} - 1$



Identify the asymptotes of each rational function.

37. $y = \frac{7}{x+1}$

38. $y = \frac{1}{x} - 5$

39. $y = \frac{12}{x-2} + 5$

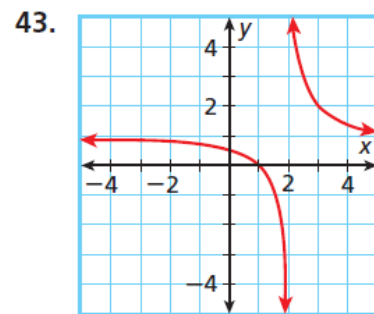
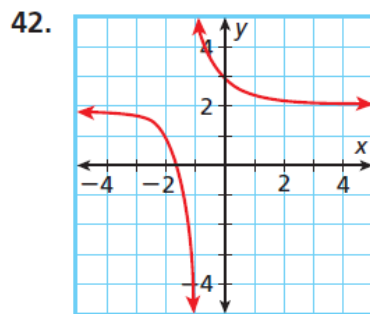
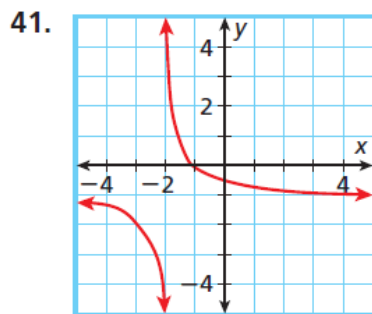
40. $y = \frac{18}{x+3} - 9$

Match each graph with one of the following functions.

A. $y = \frac{1}{x+1} + 2$

B. $y = \frac{1}{x+2} - 1$

C. $y = \frac{1}{x-2} + 1$



44. **/// ERROR ANALYSIS ///** In finding the horizontal asymptote of $y = \frac{1}{x+2} - 3$, student A said the asymptote is at $y = -3$, and student B said it is at $y = -2$. Who is incorrect? Explain the error.

