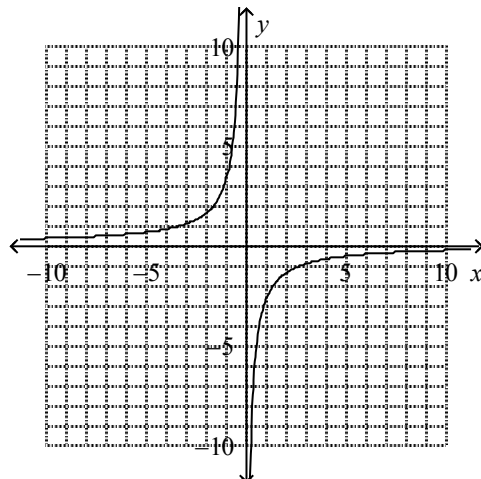


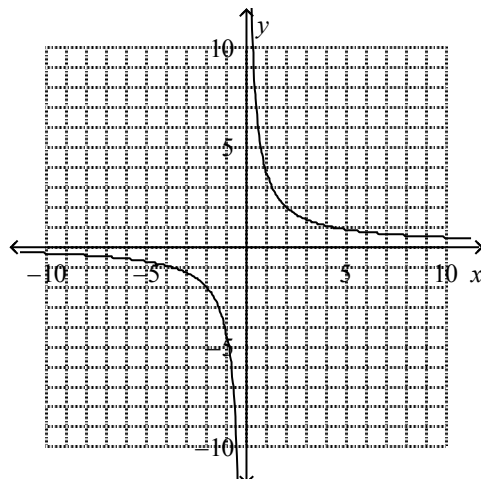
Rational Functions Review - SOLUTIONS

1. $\log_2 64 = 6$
2. 2
3. 5
4. $8^{\frac{2}{3}} = 4$
5. $\log_8 (t^2 x^5)$
6. $\ln \frac{x^3}{y}$
7. $\log_2 10 + 4 \log_2 q$
8. 0.3069
9. 545.317
10. 50
11. A varies directly as the square of r .
12. b varies directly as A and inversely as h .
13. asymptote: $x = 5$ and hole: $x = -5$
14. asymptotes: $x = 2$ and $x = -3$
15. direct variation; $y = -19x$
16. inverse variation; $y = \frac{-30}{x}$
17. $y = \frac{72}{x}$
18. 5.38
19. \$19.35
20. $y = \frac{6wx}{z}$; 6
21. 14,880 phones
22. $y = \frac{-4}{x+6} + 2$
23. $x = 1, x = 8$
24. $x = -5, x = 6$
25. $y = 0$
26. $y = 3$

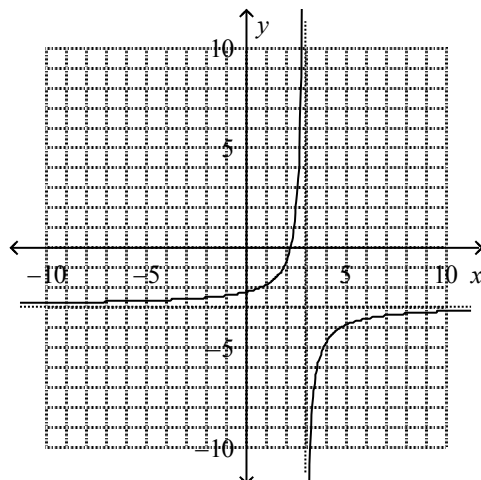
27.



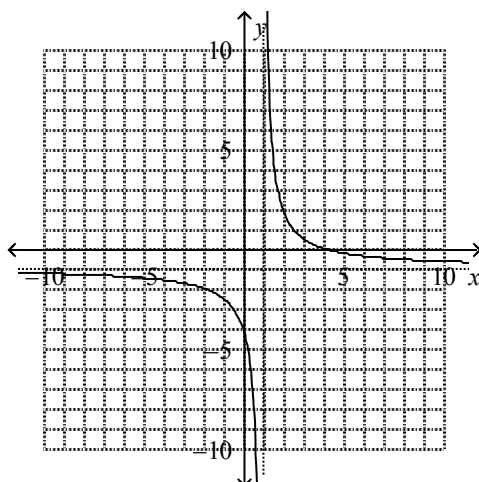
28.



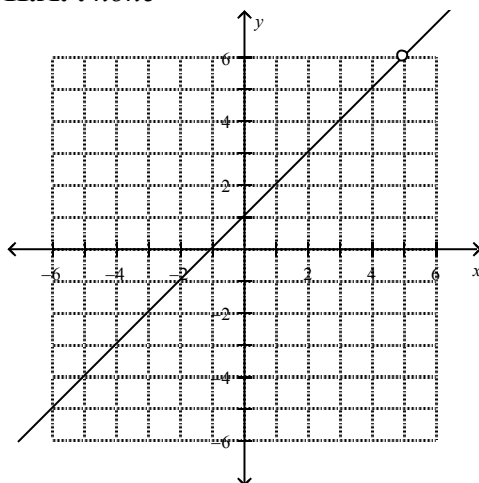
29.



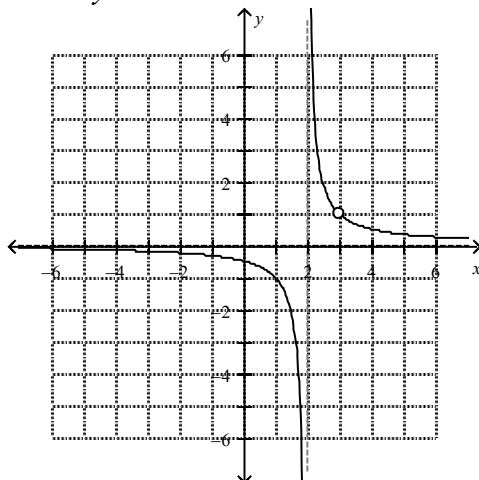
30.



31. **V.A. :** none
holes: $x=5$
H.A. : none



32. **V.A. :** $x=2$
holes: $x=3$
H.A. : $y=0$



1.

33. $a - 3; a \neq -6$

34. $\frac{x+2}{x-4}; x \neq -7, x \neq 4$

35. $\frac{3b^2}{64a}, a \neq 0, b \neq 0$

36. $\frac{a^2 - 5a}{a - 1}, a \neq -3, 0, 1$

37. $\frac{(x+2)(x-10)}{2x+1}; x \neq -3, -\frac{1}{2}, 1$

38. $\frac{(w+2)(w+2)}{w-5}, w \neq -1, 5, -2$

39. $\frac{(x-4)}{(x+2)}; x \neq -5, -3, -2, 3, 4$