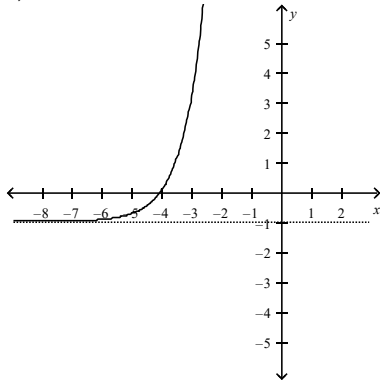


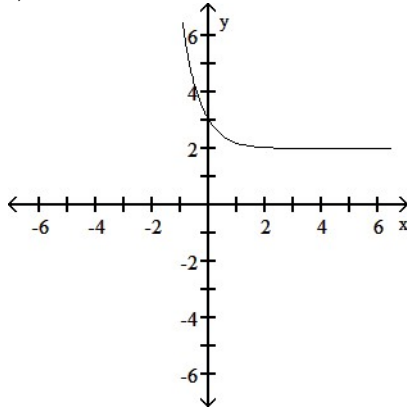
REVIEW CHAPTER 5  
SOLUTIONS

1)



domain of  $f$ :  $(-\infty, \infty)$ ; range of  $f$ :  $(-1, \infty)$ ;  
horizontal asymptote:  $y = -1$

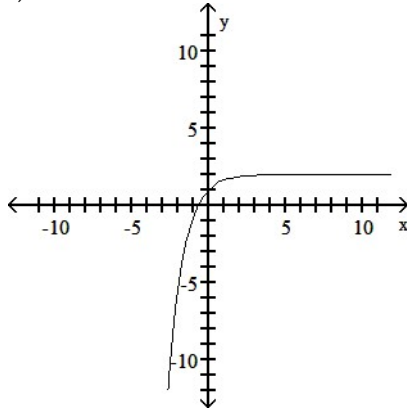
2)



domain of  $f$ :  $(-\infty, \infty)$ ; range of  $f$ :  $(2, \infty)$   
horizontal asymptote:  $y = 2$

3) {3}

4)



5) {4}

6)  $\left\{-\frac{2}{13}\right\}$

7)  $\left\{-\frac{9}{2}\right\}$

8)  $\log_7 343 = 3$

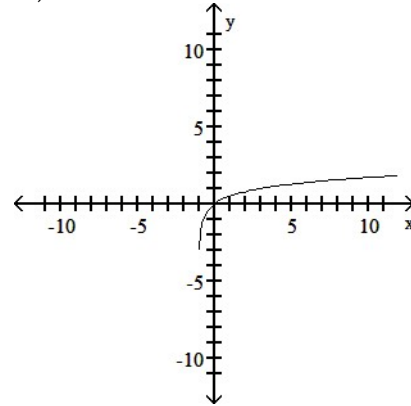
9)  $2^{-3} = \frac{1}{8}$

10) 2

11) -3

12)  $(-4, \infty)$

13)



14) {8, -1}

15) 16

16)  $3 \log_2 x - 7 \log_2 y$

17)  $\log_b \frac{q^2}{r}$

18) 2.099

19) a) {128} b) {11}

20) {-6.00}

21) {-5.31}

22) \$24,393.53

23) \$1252.91

24) 9.051%

25) 6.93 yr

26) 11.89 hours

27)  $k = 0.231$  381 rabbits

28)  $k = 1.24 \times 10^{-4}$  11,180 years