

Pre-Calculus Unit 3 Review Answers

1. $\{1\}$

2. $\frac{-15}{4}$

3. $\log_7 x = 2$

4. $b^4 = 16$

5. 3

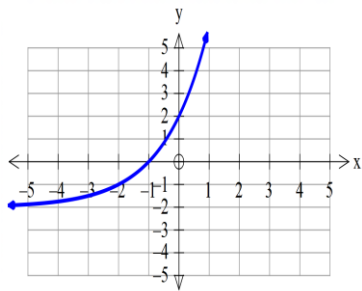
6. -3

7. $\frac{1}{2}$

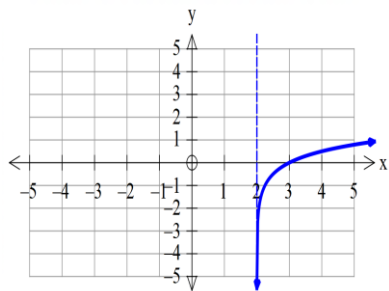
8. 1

9. 7

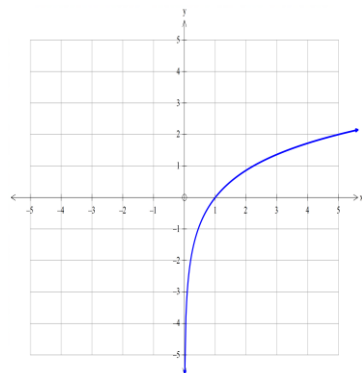
10.



11.



12.

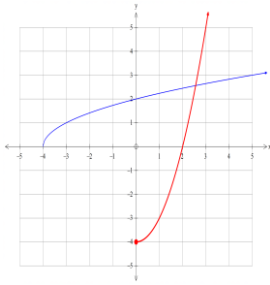


$$13. \frac{1}{2} \log_4 7 + \frac{1}{2} \log_4 x$$

$$14. \frac{1}{2} \log_3 p + \frac{1}{5} \log_3 q - 2 \log_3 t$$

$$15. \log_c \frac{q^5 t^{\frac{1}{4}}}{r^3 p^3}$$

16.



$$17. 2\sqrt{2x-1}$$

18. yes, yes

$$19. f^{-1}(x) = \frac{5x+2}{3-x}; \text{ domain of } f \{x|x \neq -5\}; \text{ range of } f: \{y|y \neq -3\};$$

20. 5

$$21. \frac{\ln 6}{\ln 4 + \ln 6} \approx 0.564$$

22. \$8568.22

23. 65.810

24. $(-\infty, 7)$

25. 6

26. 2

27. \$15,672.60

28. 9.561 years