

Answers to Chapter 3 Practice Test

1) A                      2) D                                      3) D:  $x > 2$ ; LP (3, -1); asy:  $x = 2$

4) -3                      5)  $\frac{3}{4}$                       6)  $10x^2$                       7) -3                      8)  $\pi$                       9)  $\log_m \frac{\sqrt[3]{c^2}}{a^2b^5}$

10)  $\frac{1}{3}[\log_5 x - (\log_5 y + \log_5 z)]$

11)  $x = 3$ ,  $x = -4$  extraneous solution

12)  $x = -13/31$

13) a)  $f(t) = 200000(1.04)^t$                       b) 14.268 years

14)  $t = 12.02$  days

15) Let's say 30 years: the \$224,084.45 versus \$277,200.79

16) a)  $r = 2.027\%$                       b) 79.4 minutes                      c) Never!!!