

Calculus AB

Chapter 6 Assignments

#1 Slope fields Packet Part 1

#2 Slope fields Packet Part 2

#3 6.2a p. 418 #5, 7, 8, 9, 11, 13

#4 6.2b p. 418 #27, 38, 39, 43, 59, 62, 69

#5 Chapter 6 Worksheet

Even # Text answers

6.2 #8 $y = Ce^{\frac{x^2}{2}} - 1$ ***#38*** 3.613 gms.; 1.074 gms.

62a) 45 bacteria ***b)*** $y = 44.623e^{.51481t}$ ***c)*** 2744 bacteria ***d)*** 12.292 hrs.

Slope Fields Packet

#1 $y = \frac{x^2}{4} - x + 2$

#2 $y = \frac{x^3}{3} - x + \frac{7}{3}$

#3 $y = \sin x + 4$

#4 $y = \frac{1}{x} + 2$

#5 $y = -\frac{1}{3}(4 - x^2)^{\frac{3}{2}} + 2$

#6 $y = \frac{1}{9}(x^3 - 1)^3$

#7 $y = \frac{1}{2}\sin x^2 + 1$

#8 $y = -\sec(2x)$

#9 $y = -\frac{1}{3}(9 - x^2)^{\frac{3}{2}} + 5$

#10 $y = \frac{1}{4}\cos x^2 - \frac{1}{4}$

#11 $y = \ln\left|\frac{x+2}{2}\right| + 1$

#12 $y = \frac{(\ln x)^2}{2} - 2$

#13 $y = x + \ln x + 3$

#14 $y = \ln|\sec x + \tan x| + 1$

#15 $y = -4e^{\frac{-x}{2}} + 5$

#16 $y = \frac{-5}{2}e^{-0.2x^2} + 1$

#17 $y = 6 - 6e^{\frac{-1}{2}x^2}$

#18 $y = \frac{1}{2}e^{\frac{x^2}{2}}$

#19 $x^2 + y^2 = C$

#20 $y = 4 + Ce^{-x}$

1998 #4c $f(0.2) = 3.030$

2000#6c $y = 1 - \frac{2}{x^2 + 1}$

#6d $-1 \leq y \leq 1$