

Math 1710 Section 3
Midterm 1 - Review Answers

1. -4
2. $-\frac{1}{8}$
3. 0
4. 6
5. $\sqrt{10} - 3$
6. $\frac{2}{51}$
7. $\frac{1}{5}$
8. 0
9. $-\infty$
10. ∞
11. $\frac{3}{5}$
12. $\frac{12}{5}$
13. $\frac{3x^2+2}{x^2}$
14. $\frac{x+1}{\sqrt{x^2+2x}}$
15. $\cos^2 x - \sin^2 x$
16. $(x+2)^6(x-5)^3(11x-27)$
17. $2x \sin \frac{1}{x} - \cos \frac{1}{x}$
18. $\frac{dy}{dx} = \frac{y-x(x+y)^2}{x}$
19. $\frac{dy}{dx} = \frac{1-y}{x-\cos y}$
20. $-64 \sin(2x)$
21. $\frac{x}{\sqrt{2x+5}}$
22. $-\infty$