Mat 115 Worksheet 9 Answers
☠ Tuesday, Oct 31 2017 ☠

1. $x\sin^{-1}x + \sqrt{1-x^2} + C$

2. $x\tan^{-1}(3x) - \frac{1}{6}\ln(1+9x^2) + C$

3. $\frac{1}{2}e^x(\sin x - \cos x) + C$

4. $(x/2)[\sin(\ln x) - \cos(\ln x)] + C$

5. $x\tan x + \ln|\cos x| + C$

6. $\frac{1}{2}x^2 e^{x^2} - \frac{1}{2}e^{x^2} + C$

7. $\frac{3e^4+1}{4}$

8. $\frac{2e^3+1}{9}$

9. $3\ln 3 - 2$

10. $5\pi/6 - \sqrt{3} + 1$

11. $-\pi/2$

12. $\frac{1}{3}(2\sqrt{3}\pi - \pi/2 - 2 + \ln 2)$

13. $2/3$

14. 0

15. $\frac{\sec^7 x}{7} - \frac{\sec^5 x}{5} + C$