MyMathLab

1. Solve the equation: 3x + 2 = 8.

2. Differentiate the function f(x) = 4x^3 – 2x + 1.

3. Evaluate the definite integral: ∫(2x + 3) dx from 0 to 5.

4. Find the limit of the function f(x) = (x^2 – 4)/(x – 2) as x approaches 2.

5. Determine the inverse function of f(x) = 3x – 1.

6. Simplify the expression: (2x^2 + 3x – 1) + (4x^2 – 2x + 5).

7. Solve the system of equations: 2x + y = 5 and 3x – 2y = 4.

8. Find the domain of the function f(x) = √(4 – x^2).

9. Factor the quadratic expression: x^2 + 5x + 6.

10. Determine the slope of the line passing through the points (2, 5) and (4, 9).

11. Solve the trigonometric equation: sin(x) = ½.

12. Evaluate the logarithm: log(base 2) 8.

13. Determine the radius of a circle given its circumference of 20π.

14. Find the derivative of the function f(x) = e^x + ln(x).

15. Simplify the complex number expression: (3 + 2i)(4 – i).

16. Solve the exponential equation: 2^x = 16.

17. Determine the area of a triangle with base 5 units and height 8 units.

18. Find the antiderivative of the function f(x) = 3x^2 + 2x + 1.

19. Determine the matrix product: [1 2] * [3 4].

20. Solve the trigonometric equation: cos(x) = -1/2.

21. Evaluate the definite integral: ∫(2sin(x) + 3cos(x)) dx from 0 to π.

22. Simplify the complex fraction: (3x + 2)/(x – 1).

23. Find the roots of the quadratic equation: 2x^2 + 5x -