

**Universidad Tecnológica Fidel Velázquez**  
**Cálculo Integral - Actividad 3 - Tarea**

Resolver los siguientes ejercicios.

Nombre del (la) estudiante: \_\_\_\_\_

**Hallar la derivada de las siguientes funciones. Comprobar la solución con MAPLE.**

- |                             |                                   |                                |
|-----------------------------|-----------------------------------|--------------------------------|
| 1. $y = 2 - 3x$             | 11. $s = \frac{t+4}{t}$           | 21. $u = 2v^3 - 3v^2$          |
| 2. $y = mx + b$             | 12. $y = \frac{1}{1-2x}$          | 22. $y = ax^3 + bx^2 + cx + d$ |
| 3. $y = ax^2$               | 13. $Q = \frac{\theta}{\theta+2}$ | 23. $Q = (a - b\theta)^2$      |
| 4. $s = 2t - t^2$           | 14. $s = \frac{At+B}{Ct+D}$       | 24. $y = (2 - x)(1 - 2x)$      |
| 5. $y = cx^3$               | 15. $y = \frac{x^3+1}{x}$         | 25. $y = (Ax + B)(Cx + D)$     |
| 6. $y = 3x - x^3$           | 16. $y = \frac{1}{x^2+a^2}$       | 26. $s = (a + bt)^3$           |
| 7. $u = 4v^2 + 2v^3$        | 17. $y = \frac{x}{x^2+1}$         | 27. $y = \frac{x}{a+bx^2}$     |
| 8. $y = x^4$                | 18. $y = \frac{x^2}{4-x^2}$       | 28. $y = \frac{a+bx^2}{x^2}$   |
| 9. $Q = \frac{2}{\theta+1}$ | 19. $y = 3x^2 - 4x - 5$           | 29. $y = \frac{x^2}{a+bx^2}$   |
| 10. $y = \frac{3}{x^2+2}$   | 20. $s = at^2 + bt + c$           |                                |