

6-4 Absolute Value Inequalities

- _____ 1. Solve for x: $|x+3| > 1$
- _____ 2. Solve for x: $|5x-1| < -1$
- _____ 3. Solve for x: $|2x-1| > -1$
- _____ 4. Solve for x: $|x-6| < -1$
- _____ 5. Solve for x: $|5x-1| < -1$

7-1 A Derivatives

Calculate the derivative of each function.

- _____ 1. $f(x) = 3x^2 + 5x - 2$
- _____ 2. $f(x) = -4x^3 + 5$
- _____ 3. $f(x) = 3x^3 + 5x^2 - 2x$
- _____ 4. $f(x) = \frac{3}{x^2} + \frac{2}{x} - 1$
- _____ 5. $f(x) = \frac{6}{x^4} + \frac{3}{x}$

7-1 B Slope of Line Tangent to the Graph

Find the slope of the line tangent to the graph of the given function at the given point.

- _____ 1. $f(x) = 3x^2 + 5x - 2$ at the point (2, 20)
- _____ 2. $f(x) = x^3 + 5x^2 - 1$ at the point (1, 5)
- _____ 3. $f(x) = x^5$ at the point (1, 1).
- _____ 4. $f(x) = 2x^3 + 3$ at the point (2, 19)
- _____ 5. $f(x) = x^4 + 3x^2 + x$ at the point (1, 5)