Lesson 1.6 Practice: Rates of Change and Function Behavior

School Launch · Algebra II · Unit 1: Functions and Their Graphs · Worksheet A

Calculator for decimals

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Find the average rate of change of $f(x) = 4 - 2x$ from $x = -4$ to $x = 1$. EASY

2. Find the average rate of change of $f(x) = 5 - x$ from $x = 0$ to $x = 5$. EASY

3. Find the average rate of change of $f(x) = 4x - 4$ from $x = 2$ to $x = 6$. EASY

4. Find the average rate of change of $f(x) = -3x^2 - 6x + 8$ from $x = -2$ to $x = 3$. MEDIUM

5. Find the average rate of change of $f(x) = x^2 + 5x - 1$ from $x = -2$ to $x = 3$. MEDIUM

6. Find the average rate of change of $f(x) = -x^2 - 6x + 8$ from $x = -3$ to $x = 1$. MEDIUM

7. Find the average rate of change of $f(x) = -3x^2 - x + 3$ from $x = 0$ to $x = 4$. MEDIUM

8. Find the average rate of change of $f(x) = 2^x$ from $x = -4$ to $x = -3$. HARD

9. Find the average rate of change of $f(x) = 2^x$ from $x = -3$ to $x = 0$. HARD

10. Find the average rate of change of $f(x) = 2^x$ from $x = 0$ to $x = 1$. HARD