Lesson 4.3 Practice: Polynomial Long Division

School Launch · Algebra II · Unit 4: Polynomial Functions · 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. Divide: $(-4x^2 + 11x + 20) \div (x - 4)$. EASY

2. Divide: $(-2x^2 + 8x + 10) \div (x - 5)$. EASY

3. Divide: $(-x^2 + x + 20) \div (x + 4)$. EASY

4. Divide: $(-x^3 + 6x^2 - 2x - 24) \div (x - 5)$. MEDIUM

5. Divide: $(-3x^3 - 2x^2 + 3x + 1) \div (x - 1)$. MEDIUM

6. Divide: $(3x^3 - x^2 - 7x - 8) \div (x - 2)$. MEDIUM

7. Divide: $(-2x^3 + x^2 + 3x + 2) \div (x - 2)$. MEDIUM

8. Divide: $(-5x^4 + 6x^3 + 7x^2 - 12x - 1) \div (x^2 - 2x + 1)$. HARD

9. Divide: $(4x^4 + 13x^3 - 11x) \div (x^2 + 2x - 3)$. HARD

10. Divide: $(5x^4 - 16x^3 - 12x^2 + 17x + 14) \div (x^2 - 3x - 2)$. HARD