

Quiz 2

Tuesday, February 5, 2008

Mathematics for Business

22M:013:SCA TTh 6:00 - 8:00 PM

Instructor: Matt Stoeckel

Name:

Show all work! Unless otherwise stated give the exact value.

1. For (a) to (d), write a polynomial that fits the description. (There are many correct answers.)

(a) A third-degree polynomial with leading coefficient -4.

(b) A fifth-degree polynomial with an even leading coefficient.

(c) A trinomial of degree 5.

(d) A polynomial of degree 0.

2. Perform the operations and write the result in standard form.

(a) $y^2(4y^2 + 2y - 3)$

(b) $-(5x^2 - 1) - (-3x^2 + 5)$

(c) $(x + 2y)(x - 2y)$

(d) $(8x + 3)^2$

3. Completely factor the difference of squares.

(a) $x^2 - 81$

(b) $25 - (z + 7)^2$

4. Factor the perfect square trinomial.

(a) $9x^2 - 12x + 4$

(b) $a^2 + 10a + 25$

5. In each, completely factor the expression.

(a) $x^3 - 9x$

(b) $x^2 - 2x + 1$

(c) $(t - 1)^2 - 49$

(d) $4x(2x - 1) + (2x - 1)^2$