

Chapter 5 Pretend Quiz 1

(Lessons 5-1 through 5-2)

SCORE _____

Simplify. Assume that no variable equals 0.

1. $(4n^2y^2)(-6n^2y^5)$

2. $\frac{16(x^3y)^2}{2(xy^0)^4} = \frac{8x^6y^2}{x^4} = 8x^2y^2$

3. $(4x^5 + x^3 - 7x^2 + 2)(3x - 1)$

$3x \begin{array}{r} 4x^5 + x^3 - 7x^2 + 2 \\ 12x^6 + 3x^4 - 21x^3 + 6x \\ -4x^5 - x^3 + 7x^2 - 2 \\ \hline 8x^6 - 4x^5 - 22x^3 + 7x^2 + 6x - 2 \end{array}$

Simplify.

4. $(12x^3 - 16x^2y + 3xy^2 + 9y^2)(2x^{-3}y)^{-1}$

$\frac{12x^3}{2x^{-3}} - \frac{16x^2y}{2x^{-3}y} + \frac{3xy^2}{2x^{-3}y} + \frac{9y^2}{2x^{-3}y}$

5. $(3p + 5r) + (6p - 4r)$

6. $(2x - 3) - (5x - 6)$

8. $(30a^2 - 11a + 15)(a - 6)^{-1}$

7. $(4x - 5)(2x + 7)$

$4x \begin{array}{r} 2x + 7 \\ 8x^2 + 28x \\ -10x - 35 \\ \hline 8x^2 + 18x - 35 \end{array}$

$6 \overline{) 30 - 11 15}$

$5 \overline{) 169}$

$30 \quad 169 \quad 1029$

1. $-24n^4y^7$

2. $8x^2y^2$

3. $12x^6 - 4x^5 - 22x^3 + 7x^2 + 6x - 2$

4. $\frac{6x^6}{y} - 8x^5 + \frac{3x^4y}{2} + \frac{9x^3y}{2}$

5. $9p + r$

6. $-3x + 3$

7. $8x^2 + 18x - 35$

8. $30a + 169 + \frac{1029}{a-6}$

Simplify.

9. $(m^2 + m - 6) \div (m + 4)$

10. $(a^3 - 6a^2 + 10a - 3) \div (a - 3)$

$4 \overline{) 169}$

$3 \overline{) 1 - 6 10 - 3}$

$4 \overline{) 169}$

$3 \overline{) 1 - 6 10 - 3}$

$30 \quad 169 \quad 1029$

9. $m - 3 + \frac{6}{m+4}$

10. $a^2 - 3a + 1$

Chapter 5 Pretend Quiz 2

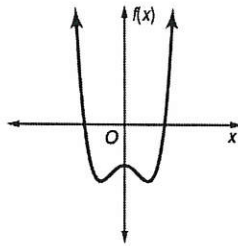
(Lessons 5-3 through 5-4)

SCORE _____

1. If $p(x) = 3x^2 - 2x + 1$, find $p(-4)$.

$3(16) - 8 + 1 = 48 - 8 + 1 = 41$

2. Determine whether the graph at the right represents an odd-degree polynomial or an even-degree polynomial function. Then state the number of real zeros.



1. $p(-4) = 57$

2. Even, two real zeros

between -1 and 0
zeros and 1 and 2

3. Graph $f(x) = x^3 - 5x^2 + 4x + 3$ by making a table of values. Then determine consecutive values of x between which each real zero is located. Estimate the x -coordinates at which the relative maxima and relative minima occur.

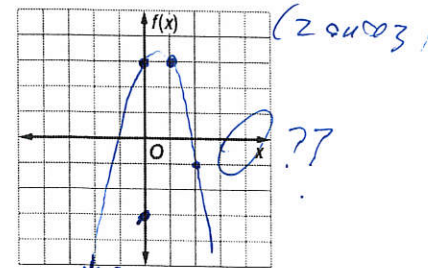
x	y
-2	-33
-1	-7
0	3
1	3
2	-1

$(-2)^3 - 5(-2)^2 + 4(-2) + 3 = -8 - 20 - 8 + 3 = -36 + 3 = -33$

$(-1)^3 - 5(-1)^2 + 4(-1) + 3 = -1 - 5 - 4 + 3 = -7$

$1 - 5 + 4 + 3 = 3$

$8 - 20 + 4 + 3 = -1$



State the degree and of each polynomial.

4. $8x^2 + 2x - 9$

5. 235

3. _____

4. 2

5. 0