ALEKS® Polynomials Quiz 1 #1

Beginning and Intermediate Algebra Combined / MATH 103 - Fall 2014 – 504 (Prof. Miller)

Student Name/ID:

Instructor Note:
Directions: Every problem is worth two points. One point is for trying the problem and showing your work and one point is for getting the correct answer. There are an additional five points for demonstrating the study strategy that is posted on the board and talked about at the beginning of class.

1. Find the greatest common factor of these two expressions.

$16y^4u^6v^2$ and $24u^8v^7$

2. Rewrite without parentheses.

$\left(2c^2d^4-4d^3\right)\left(-5c^6d\right)$

Simplify your answer as much as possible.

3. What are the leading coefficient and degree of the polynomial?

$-5x+20x^3+1-8x^4$

Leading coefficient:

Degree:

4. Divide.

$$\left(24x^3+4x^2+14x+3\right)\div\left(6x-2\right)$$

Your answer should give the quotient and the remainder.

Quotient:

Remainder:

5. Multiply.

$$\left(3v+3y-4\right)\left(4v-y\right)$$

Simplify your answer.

6. Divide.

$$\left(-12x^5y^6+14xy^6\right)\div\left(-3x^2y^5\right)$$

Simplify your answer as much as possible.

7. Factor.

$$y^2-10y+16$$

8. Simplify.

$$\left(-7t^2+3t-1\right)+\left(2t^2+4t+5\right)$$

9. Factor $6y^2+9y^3$

10. Rewrite without parentheses and simplify.

$$(u-4)^2$$

11. Factor by grouping.

$$ux-7x-3u+21$$

12. Factor.

$$3y^2-4y-20$$

13. Factor:

$$5x^2-3xy-14y^2$$

14. Factor by grouping.

$$wy-20w+5y-4w^2$$

15. Use the distributive property to remove the parentheses.

$$9x^6\left(8x+7x^2\right)$$

Simplify your answer as much as possible.

Polynomials Quiz 1 #1 Answers for class Beginning and Intermediate Algebra Combined / MATH 103 - Fall 2014 – 504

1. $8u^6v^2$

2. $-10c^8d^5+20c^6d^4$

3. Leading coefficient: -8

Degree: 4

4. Quotient: $4x^2+2x+3$

Remainder: 9

5. $12v^2+9vy-3y^2-16v+4y$

6. $4x^3y-\frac{14y}{3x}$

7. $(y-2)(y-8)$

8. $-5t^2+7t+4$

9. $3y^2(2+3y)$

10. $u^2-8u+16$

11. $(u-7)(x-3)$

12. $(y+2)(3y-10)$

13. $(x-2y)(5x+7y)$

14. $(w+5)(y-4w)$

15. $72x^7+63x^8$