

ALEKS® Polynomial Quiz 2 #1

Beginning Algebra / Math 100 – Master No Book (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. Divide.

$$\frac{6x^4 - 12x^3}{2x^2}$$

Simplify your answer as much as possible.

2. Give the degree of the polynomial.

$$5 + 2y + v^9 w^3 - 9w^9 y^5 v^4$$

3. Give the degree of the polynomial.

$$6y^9 - 14w^2 y^3 v^3 - 6 + v^5 w$$

4. Divide.

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

Simplify your answer as much as possible.

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

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

Leading coefficient:

Degree:

6. Divide.

$$(12u^6z^4 - 23u^6z^2) \div (-4u^4z^3)$$

Simplify your answer as much as possible.

7. Rewrite without parentheses and simplify.

$$(u - 4)^2$$

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

$$15v + 20 - 10v^8 + 3v^4$$

Degree:

Leading coefficient:

9. Divide.

$$(-15v^4x^2 + 4v^3x) \div (-2v^4x^2)$$

Simplify your answer as much as possible.

10. Multiply.

$$(u + 7)(u - 7)$$

Simplify your answer.

11. Multiply.

$$(5a - b)(5a + 8b)$$

Simplify your answer.

12. Multiply.

$$(3v + 3y - 4)(4v - y)$$

Simplify your answer.

13. Rewrite without parentheses and simplify.

$$(v+6)^2$$

14. Divide.

$$\frac{16v^6 - 20v^3}{4v^3}$$

Simplify your answer as much as possible.

15. Divide.

$$\frac{18x^6 - 24x^5}{3x^2}$$

Simplify your answer as much as possible.

Polynomial Quiz 2 #1 Answers for class Beginning Algebra / Math 100 – Master No Book

1. $3x^2 - 6x$

2. 18

3. 9

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

5. Leading coefficient: -8
Degree: 4

6. $-3u^2z + \frac{23u^2}{4z}$

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

8. Degree: 8
Leading coefficient: -10

9. $\frac{15}{2} - \frac{2}{vx}$

10. $u^2 - 49$

11. $25a^2 + 35ab - 8b^2$

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

13. $v^2 + 12v + 36$

14. $4v^3 - 5$

15. $6x^4 - 8x^3$