

ALEKS® Polynomial Quiz 2 #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. Solve for u

$$u^2 - 10u + 21 = 0$$

2. The length of a rectangle is 5 yd less than twice the width, and the area of the rectangle is 33 yd^2 . Find the dimensions of the rectangle.

3. Multiply.

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

Simplify your answer.

4. The area of a rectangle is 35 yd^2 and the length of the rectangle is 3 yd more than twice the width. Find the dimensions of the rectangle.

5. Give the degree of the polynomial.

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

6. Factor.

$$125 - 8v^3$$

7. Factor.

$$w^2 - 36$$

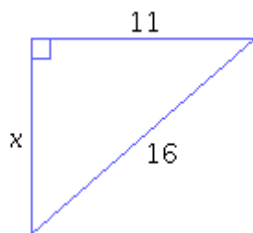
8. Write the quadratic equation whose roots are 1 and -4 , and whose leading coefficient is 3.

9. Multiply.

$$(u + 1)(u - 5)$$

Simplify your answer.

10. For the following right triangle, find the side length x . Round your answer to the nearest hundredth.



11. Rewrite without parentheses.

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

Simplify your answer as much as possible.

12. Solve.

$$(5y + 4)(1 + y) = 0$$

(If there is more than one solution, separate them with commas.)

13. Factor completely.

$$9x^5 + 24x^4 + 12x^3$$

14. Solve.

$$(1 - w)(5w + 4) = 0$$

(If there is more than one solution, separate them with commas.)

15. Simplify.

$$(5w^2 + 9w + 4) + (-2w^2 + 4w + 4) - (-5w^2 + 7w - 5)$$

**Polynomial Quiz 2 #1 Answers for class Beginning and Intermediate
Algebra Combined / MATH 103 - Fall 2014 – 504**

1. $u = 37$

2. Length: 6 yd
Width: 5.5 yd

3. $u^2 - 49$

4. Length: 10 yd
Width: 3.5 yd

5. 18

6. $(5 - 2v)(25 + 10v + 4v^2)$

7. $(w + 6)(w - 6)$

8. $3x^2 + 9x - 12 = 0$

9. $u^2 - 4u - 5$

10. 11.62

11. $-10c^8d^5 + 20c^6d^4$

12. $y = -\frac{4}{5}, -1$

13. $3x^3(x + 2)(3x + 2)$

14. $w = 1, -\frac{4}{5}$

15. $8w^2 + 6w + 13$