Class Name : **MATH 1050/1051 Fall 2018**

Instructor Name : **Nguyen**

Student Name : _____

Instructor Note :

1. Simplify.

$$\frac{x^{-4}}{x^{6}}$$

Write your answer with a positive exponent only.

2. Factor by grouping.

$$12v^3 - 16v^2 + 9v - 12$$

3. Factor by grouping.

$$2v^6 - 3v^4 + 4v^2 - 6$$

4. Factor by grouping.

$$sm - 3s + pm - 3p$$

5. Factor by grouping.

$$-3v + 6u^2 - 18u + uv$$

6. Factor.

$$3x^2+11x-4$$

7. Factor.

$$2x^2-19x+30$$

8. Factor.

$$8x^3-27$$

9. Simplify.

$$\left(\frac{y^{-5}}{2x^2}\right)^{-5}$$

Write your answer using only positive exponents.

10. Simplify.

$$\frac{5w^2-15w-90}{w^2-w-30}$$

11. Multiply and simplify.

$$(\sqrt{x}+\sqrt{3})^2=\square$$
$$(\sqrt{x}-3\sqrt{3})(\sqrt{x}+3\sqrt{3})=\square$$

12. Simplify.

$$\frac{\frac{10c^2d}{7ab^3}}{\frac{5c^3d^3}{14b^4}}$$

13. A rectangular garden measures 28 ft by 34 ft. Surrounding (and bordering) the garden is a path 2 ft wide. Find the area of this path. Be sure to include the correct unit in your answer.

Obj. 2 #5 Answers for class MATH 1050/1051 Fall 2018

1. $\frac{1}{x^{10}}$

2. $(3v-4)(4v^2+3)$

3. $(2v^2-3)(v^4+2)$

4. $(m-3)(s+p)$

5. $(v+6u)(-3+u)$

6. $(x+4)(3x-1)$

7. $(x-2)(2x-15)$

8. $(2x-3)(4x^2+6x+9)$

9. $32x^{10}y^{25}$

10. $\frac{5(w+3)}{(w+5)}$

11.

$(\sqrt{x}+\sqrt{3})^2=x+2\sqrt{3x}+3$

$(\sqrt{x}-3\sqrt{3})(\sqrt{x}+3\sqrt{3})=x-27$

12. $\dfrac{4b}{acd^2}$

13. 264 ft^2