Name: Solution

MAC1105 Section 1A26
Quiz 3

Please show all of your work in a NEAT and ORGANIZED fashion.

1. (4 points) Simplify the expression and write your answer using only positive exponents.

$$\frac{(-3x^2y)^3x^{-4}y^2}{xy^7} =$$

$$\frac{(-27x^6y^3)x^{-4}y^2}{xy^7} =$$

$$\frac{-27x^2y^5}{xy^7} =$$

$$-27xy^{-2} = \frac{-27x}{y^2}$$

2. (3 points) Write in radical form and evaluate.

$$(27)^{4/3} =$$

$$(\sqrt[3]{27})^4 \text{ or } \sqrt[3]{27^4} = \quad (\text{either form is okay})$$

$$3^4 =$$

$$81$$

3. (3 points) Simplify the expression using the rules for radicals.

$$(\sqrt{20}\cdot\sqrt{5})+\sqrt{\sqrt{16}} =$$

$$\sqrt{20\cdot5}+\sqrt[4]{16} = \quad \text{OR} \quad \sqrt{20\cdot5}+\sqrt{4} =$$

$$\sqrt{100}+2 = \qquad \sqrt{100}+2 =$$

$$10+2=12 \qquad 10+2=12$$