

MAT 012 Take-Home Quiz 5 (ch 10.1-10.3)

Name: _____

Due: see webpage

Section: _____

In the following, assume that all variables are positive numbers.

1. Simplify. Give the answer in radical notation:

$$\sqrt[12]{x^4 y^8} =$$

2. Simplify and write the answer in radical notation:

$$\sqrt[5]{x^3} \cdot \sqrt[8]{x} =$$

3. Write in radical notation: $a^{-\frac{5}{6}} =$

4. Simplify: $\sqrt[3]{750} =$

5. Simplify: $\sqrt{2xy^5} \cdot \sqrt{50x^3y^9} =$

6. Simplify: $\sqrt{363x^7y^{10}z^5} =$

7. Simplify: $\sqrt[4]{14x^5y^{13}} \cdot \sqrt[4]{8x^5y^{10}} =$