

Review for Quiz

$$1. 2x^{-2} = \frac{2}{x^2}$$

$$2. (7a)^0 = 1$$

$$3. a^7 a^{-4} = a^3$$

$$4. 81^{\frac{3}{4}} = \underbrace{(3 \cdot 3 \cdot 3 \cdot 3)}_{3^4}^{\frac{3}{4}}$$

$3^3 = 3 \cdot 3 \cdot 3$
 27

$$(3^4)^{\frac{3}{4}} = 3^3 = 27$$

$$5. (a^4)^3 = a^{12}$$

$$6. (2b)^4 = 2^4 b^4 = 16b^4$$

$$7. (2ab^2)^3 = 2^3 a^3 (b^2)^3 = 8a^3 b^6$$

$$8. (3xy^{\frac{2}{5}})^2 (2x^2y^{\frac{1}{5}})^3$$

$$[3^2 x^2 (y^{\frac{2}{5}})^2] [2^3 (x^2)^3 (y^{\frac{1}{5}})^3]$$

$$9x^2 y^{\frac{4}{5}} \cdot 8x^6 y^{\frac{3}{5}}$$

$$9 \cdot 8 x^2 \cdot x^6 y^{\frac{4}{5}} y^{\frac{3}{5}}$$

$$72 x^8 y^{\frac{7}{5}}$$