

Pre-test 14

Rewriting Exponents

Rewrite + evaluate, if possible.

Name: _____

1) $\sqrt[7]{11^{10}}$

2) $14^{\frac{3}{5}}$

3) $\sqrt[3]{x^9}$

4) $12^{\frac{2}{4}}$

5) $(-\sqrt[6]{20^4})^5$

6) $(6^{\frac{8}{5}})^3$

Simplify as much as possible with no negative exponents.

$$7) \frac{16x^5}{8x^3}$$

$$8) \frac{12xy^7}{x^{-2}y^5 \cdot 24}$$

$$9) \frac{(9x^3)^2}{5x^{12}}$$

$$10) \frac{2(2^2x^{-1}y^{-5})^3}{280x^5y^9}$$

$$11) \frac{5x^3 \cdot 7x^5 \cdot 4x^2}{210(x^3y^9 \cdot 4)^2}$$

$$12) \frac{7(xy^4 \cdot 9)^3}{18 \cdot 12x^7(y^5)^4}$$