

REVIEW FOR QUIZ

Total:

/27

Mrs. Behnke

MAP 4CI

Algebraic Models

Name: _____

1. Simplify using the exponent laws, then evaluate. Give your answer as an integer or a fraction.

/6 a) $5^{-3} \times 5^2 \times 5^4$

b) $4^{17} \div 4^{15}$

c) $(10^4)^{-1}$

2. Simplify the following exponential expressions using the Exponent Laws
(remember: no negative exponents in your answers).

/6 a) $x^5(x^3)^2$

b) $\frac{d^{-5}}{d^2}$

c) $(x^{-2} \times x^5)^3$

d) $(x^8y^7) \div (x^4y^{-1})^2$

e) $(3xy^9)^3$

f) $(-123x^{-137}y^9)^0$

g) -5^0

/9

3. Express in radical form, then evaluate exactly.

a) $(-27)^{\frac{1}{3}}$

b) $625^{\frac{3}{4}}$

c) $(9)^{\frac{3}{2}}$

/6