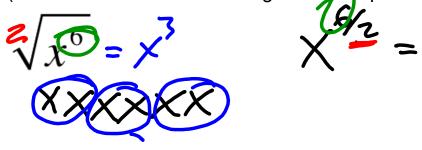
Warm Up

1.
$$\sqrt{54x^3y^2}$$
 3xys

2.
$$\frac{4x^{5}y^{-1}}{4x^{8}y^{2}}(x^{3}y^{5})$$
 $\frac{1}{x^{3}y^{5}} = x^{3}y^{5}$

1-4 Rational Exponents
Reduce Assuming all variables are greater then or equal to zero.

(You can either do these using rational exponents or not.)



$$\sqrt[3]{x^{12}} = X^{1/3}$$

Rational exponent Calc task

$$a^{\left(\frac{1}{2}\right)} = \sqrt{2}$$

$$a^{2} = \sqrt$$

1, 8, 27, 64, 125, 216

$$a^{(2)} = \sqrt[3]{\alpha^2}$$

$$a^{\left(\frac{m}{n}\right)} = \sqrt[n]{\Delta^{n}}$$

Write each of the following as a radical.

$$9^{\frac{1}{2}} = \sqrt{9} \qquad (-64)^{\frac{1}{3}}$$

$$\sqrt[3]{(-64)'}$$

$$100^{\frac{1}{2}} = \sqrt{100} - 100^{\frac{1}{2}} = \sqrt{100} z^{\frac{1}{2}}$$

Write each of the following as a rational exponent.

$$\left(\sqrt[5]{x}\right)^7 = \left(x\right)^{\frac{7}{5}}$$

$$\left(\sqrt[4]{7x}\right)^5$$

$$\left(\sqrt[6]{2x}\right)^5 = \left(2x\right)^5$$

$$\left(\sqrt[4]{7x}\right)^5$$

Simplify the following

$$\frac{3}{\sqrt{8}} \frac{8}{\sqrt{8}} \frac{6}{\sqrt{3}} \frac{6}{\sqrt{3}$$

$$(125x^{6})^{\frac{5}{3}}$$
 $(125x^{6})^{\frac{5}{3}}$
 $(25^{\frac{5}{3}})^{\frac{5}{3}}$
 $(25^{\frac{5}{3}})^{\frac{5}{3}}$