

Pg. A11 0.2A – Exponents and Radicals

Ex 1:

Evaluate each expression.

a) $\frac{4 \cdot 3^{-2}}{2^{-2} \cdot 3^{-1}}$

b) $(-2)^0$

Ex 2:

Evaluate the expression for the given value of x.

Expression	Value
$7x^{-2}$	$x = 4$

Ex 3:

Simplify the expression.

a) $\frac{r^4}{r^6}$

b) $\left(\frac{4}{y}\right)^3 \left(\frac{3}{y}\right)^4$

Ex 4:

Rewrite each expression with positive exponents and simplify.

a) $(4y^{-2})(8y^4)$

b) $\left(\frac{x^{-3}y^4}{5}\right)^{-3}$

Ex 5:

Evaluate each expression without using a calculator.

a) $\sqrt{25 \times 10^8}$

b) $\sqrt[3]{8 \times 10^{15}}$

Ex 6:

Evaluate each expression without using a calculator.

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

b) $36^{\frac{3}{2}}$