

NAME _____

Module 11 Simplifying Algebraic Expressions
with Polynomials

Lesson 1 Applying Rules of Exponents



**guided
practice**

Set 1

1. Simplify: $t^4 \cdot t^5$

t^9

3. Simplify: $\frac{b^8}{b^5}$

b^3

5. Simplify: 2^{-5}

$\frac{1}{32}$

2. Simplify: $9^5 \cdot 9^{-3}$

81

4. Simplify: $\frac{m^4}{n^2}$

Cannot be simplified

6. Simplify: $(-4)^{-2}$

$\frac{1}{16}$

Set 2

1. Simplify: $(x^4)^5$

x^{20}

3. Simplify: $\left(\frac{x}{2}\right)^4$

$\frac{x^4}{16}$

5. Simplify: $(6q^3)^2$

$36q^6$

2. Simplify: $(5a)^3$

$125a^3$

4. Simplify: $\left(\frac{-3}{b}\right)^3$

$\frac{-27}{b^3}$

