

2.9: Extending Understanding

We can combine our knowledge of exponent laws and polynomials to answer more complicated questions.

Monomial x Monomial

Simplify: $(3x^2y)(-2xy)$

STEPS TO USE

- 1) Multiply the coefficients (numbers) first
- 2) Multiply the powers by using the product law (add exponents of powers with the same bases)

Examples

Simplify:

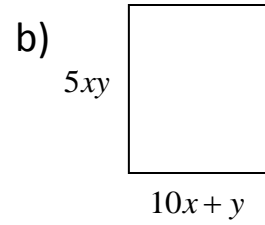
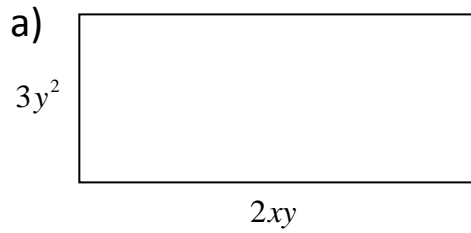
a) $(6x^2)(2x^3)$

b) $(19x^5y^2)(xy^3)$

c) $(10a^5)(b^5)(abc)$

Applying Algebra to Measurement

Find a **simplified** expression for the area of each rectangle:



Homework: p.271-272 #2, 3, 6, 8a-d, 9, 10