Algebra 1 7.1
Multiply monomials using the properties of exponents
Simplify expressions using properties of exponents

monomial
constant
linear
nonlinear
exponent
base

activity: triangle puzzles (if time)
5 in a row

KeyConcept Simplify Expressions

To simplify a monomial expression, write an equivalent expression in which:

- each variable base appears exactly once,
- there are no powers of powers, and
- all fractions are in simplest form.

Circle song?

$$A = \pi r^2$$

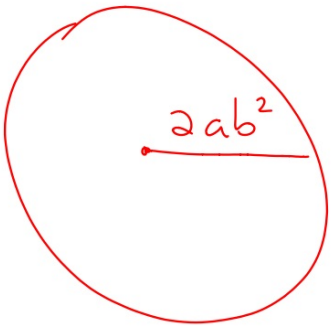
$$C = \pi d$$

Triangle puzzle

$$A = \frac{1}{2} b h$$

$$= \frac{b \cdot h}{2}$$

5 in a row



$$A = \pi r^2$$
$$= \pi (2ab^2)(2ab^2)$$
$$= 4\pi a^2 b^4$$

base $= 4xy^2$

height $= 3x^2y^2$

$$A = \frac{1}{2}bh$$
$$= \frac{1}{2}(4xy^2)\cdot(3x^2y^2)$$
$$= 6x^3y^4$$

$$\left[\left(-2x^2y^3\right)^2\right]^3$$

$$\left[(-2xx)(-2xx)\right]\cdot\left[(xx)(xx)\right]\cdot\left[(yyy)(yyy)\right]$$

$$64x^{12}y^{18}$$