

Perform the operations and simplify. Write answers without using negative exponents.

Ex: Expand:

(a)  $(-2x + 3y)(3x + y)$

(b)  $(t + 8)^2$

Ex: Simplify:  $\frac{9m^4n^7 - 15m^3n^4}{12m^3n^3}$

Ex: Factor  $2xm - 3m$

Ex: Factor the expression completely.

(a)  $2ax + 4ay - bx - 2by$

(b)  $8x^2 - 10x - 3$

Ex: Simplify the expression. Assume that the variable represents a positive number so that no absolute value symbols are needed.

$$y\sqrt{112y} + 4\sqrt{175y^3}$$