

Name: \_\_\_\_\_

1. Simplify each of the following by performing the indicated operation(s).

(a)  $(a^2 - b^{3/2})(a^2 + b^{3/2})$

(b)  $(3y - 2)(9y^2 + 6y + 4)$

2. Factor the following expressions completely:

(a)  $4x^3 - 36x$

(b)  $2x^3 + 8x^2 - x - 4$

(c)  $(x - 3)^2(y - 4)^3 + (y - 4)^2(x - 3)^3$