

9-2 Skills Practice: *Multiply Polynomials***Alg 1****1. Find the product.**

a. $x^2(6x^2 - 3x - 1)$

b. $-5a(46a^2 - 3a + 1)$

c. $4d^2(-2d^3 + 5d^2 - 6d + 2)$

d. $(3x + 1)(2x - 5)$

e. $(2y + 3)(y - 5)$

f. $(6a - 3)(4a - 1)$

g. $(b - 8)(5b - 2)$

h. $(8m + 7)(2m + 3)$

i. $(-p + 2)(3p^2 + 1)$

j. $(2z - 7)(-z + 3)$

k. $(-3d + 10)(2d - 1)$

l. $(n + 1)(n^2 + 4n + 5)$

m. $(w - 3)(w^2 + 8w + 1)$

n. $(2t + 5)(t^2 + 3t - 1)$

o. $(x^2 - 4xy + y^2)(5xy)$

2. Simplify the expression.

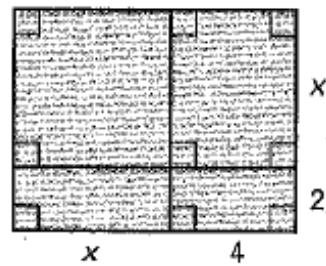
a. $a(3a + 1) + (a + 1)(a - 1)$

b. $(x + 1)(x + 5) - x(4x - 1)$

c. $(m + 7)(m - 3) + (m - 4)(m + 5)$

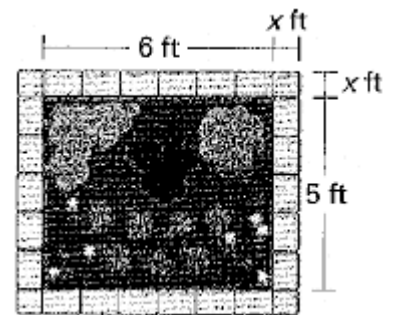
3. Write a polynomial for the area of the shaded region.

a.



4. You are designing a rectangular flower bed that you will border using brick pavers. The width of the border around the bed will be the same on every side, as shown.

a. Write a polynomial that represents the total area of the flower bed and the border.



b. Find the total area of the flower bed and border when the width of the border is 1.5 feet.