

Section 4.4 Focus Exercises

1. Practice using the FOIL method to multiply these binomials. Remember to first write all four terms, then combine like terms, and write the answer in descending order.

a) $(x + 3)(x + 9)$

b) $(x - 5)(x - 3)$

c) $(x + 1)(x - 8)$

d) $(x + 7)(x - 2)$

e) $(3x + 5)(2x - 5)$

f) $(2x - 9)(4x - 1)$

g) $(5x - 2)(5x + 2)$

h) $(4x + 3)(4x - 3)$

i) $(7x - 1)(7x - 1)$

j) $(3x + 6)(3x + 6)$

k) $(x - 3)(2x + 8)$

l) $(x^2 + 4)(x + 5)$

m) $(2x - 1)(3x^2 - 6)$

n) $(4x^2 - 5)(x^2 + 1)$

o) $(2x^2 - 5)(2x^2 - 5)$

2. Practice using the FOIL method to multiply these binomials *in just one step!*. Remember to write the answer in descending order.

a) $(x + 8)(x + 2)$

b) $(x + 9)(x + 6)$

c) $(x - 3)(x - 8)$

d) $(x - 6)(x - 4)$

e) $(x + 10)(x - 3)$

f) $(x + 2)(x - 4)$

g) $(x + 6)(x + 6)$

h) $(x - 7)(x - 7)$

i) $(x + 8)(x - 8)$

j) $(x - 10)(x + 10)$

k) $(2x + 1)(x + 5)$

l) $(4x + 3)(x + 2)$

m) $(3x - 6)(2x - 2)$

n) $(5x - 4)(2x - 3)$

o) $(x + 6)(3x - 5)$

p) $(7x + 1)(2x - 3)$

q) $(4x - 3)(5x + 1)$

r) $(2x - 5)(2x - 5)$

s) $(6x + 1)(6x + 1)$

t) $(9x - 2)(9x + 2)$

u) $(6x + 4)(6x - 4)$