

## Unit 5.3 Multiplication of Polynomials

1. Find the product and simplify if possible

a.  $-3x^2(2x^3 - 5x) =$  \_\_\_\_\_

b.  $3x(2x+1) - 2(2x+1) =$  \_\_\_\_\_

c.  $(x - 2)(x - 1) =$  \_\_\_\_\_

d.  $(y + 3)(y^2 - y + 4) =$  \_\_\_\_\_

e.  $(2x^2 + 3x + 5)(x^2 + 2x - 3) =$  \_\_\_\_\_

f.  $(x + 1)(x^2 - x + 1) =$  \_\_\_\_\_

g.  $(x + 1)(x + 2)(x + 3) =$  \_\_\_\_\_

h.  $(t^2 + 3t + 2)^2 =$  \_\_\_\_\_

i.  $(2a + 3)(a + 1) - ((a - 2)(a - 2)) =$  \_\_\_\_\_

j.  $(x - 7)^2 =$  \_\_\_\_\_

k.  $(x + 9)(x - 9) =$  \_\_\_\_\_

l.  $(2x + 7)(2x - 7) =$  \_\_\_\_\_

m.  $(x^2 - 4)^2 =$  \_\_\_\_\_

n.  $(4x - 3)(x + 4) =$  \_\_\_\_\_

o.  $\left(x + \frac{1}{4}\right)\left(x - \frac{1}{2}\right) =$  \_\_\_\_\_

p.  $\left(x - \frac{2}{7}\right)^2 =$  \_\_\_\_\_