

## Polynomial Worksheets

1. Use the distributive property to write each of the following expressions as the sum of monomials.

a)  $3a(4 + a)$

b)  $x(x + 2) + 1$

c)  $\frac{1}{3}(12z + 18z^2)$

d)  $4x(x^3 - 10)$

e)  $(x - 4)(x + 5)$

f)  $(2z - 1)(3z^2 + 1)$

g)  $(10w - 1)(10w + 1)$

h)  $(-5w - 3)w^2$

i)  $16s^{100} \left( \frac{1}{2}s^{200} + 0.125s \right)$

j)  $(2q + 1)(2q^2 + 1)$

## Polynomial Worksheets

1. Use the distributive property to write each of the following expressions as the sum of monomials.

a)  $3a(4 + a)$

$$3a^2 + 12a$$

b)  $x(x + 2) + 1$

$$x^2 + 2x + 1$$

c)  $\frac{1}{3}(12z + 18z^2)$

$$6z^2 + 4z$$

d)  $4x(x^3 - 10)$

$$4x^4 - 40x$$

e)  $(x - 4)(x + 5)$

$$x^2 + x - 20$$

f)  $(2z - 1)(3z^2 + 1)$

$$6z^3 - 3z^2 + 2z - 1$$

g)  $(10w - 1)(10w + 1)$

$$100w^2 - 1$$

h)  $(-5w - 3)w^2$

$$-5w^3 - 3w^2$$

i)  $16s^{100} \left( \frac{1}{2}s^{200} + 0.125s \right)$

$$8s^{300} + 2s^{101}$$

j)  $(2q + 1)(2q^2 + 1)$

$$4q^3 + 2q^2 + 2q + 1$$