Name: _____   Date: _____

Learning Goal 1.1	Given a polynomial expression, identify the GCF and use it to find factored form.

Factor the following expressions.

a. $3g + 6$

$$GCF(3g, 6) = 3$$
$$3g + 6 = 3(g + 2)$$

b. $8d + 12d^2$

$$GCF(8d, 12d^2) = 4d$$
$$8d + 12d^2 = 4d(2 + 3d)$$

c. $6 - 12z + 18z^2$

$$GCF(6, -12z, 18z^2) = 6$$
$$6 - 12z + 18z^2 = 6(1 - 2z + 3z^2)$$

d. $-20c^4d - 30c^3d^2 - 25cd$

$$GCF(-20c^4d, -30c^3d^2, -25cd) = -5cd$$
$$-20c^4d - 30c^3d^2 - 25cd = -5cd(4c^3 + 6c^2d + 5)$$