Name: _____

Common Factoring

1. Common factor each of the following expressions.

a) $7x^2 + 14x - 21$

b) $3b^2 + 15b$

c) $12x^2 - 8x + 16$

d) $-25m^2 - 10m$

e) $3x^4 - 9x^2 + 15x^3$

f) $y^3 + y^5 - y^2$

g) $9x^2 - 6x + 18$

h) $27y^3 - 9y^4$

i) $2x(x+4) + 5(x+4)$

j) $4c(c-3) - 5(c-3)$

k) $dc^2 - 2acd + 3a^2d$

l) $-10a^2c + 20ac - 5ac^3$

m) $3a^5c^3 - 2ac^2 + 7ac$

n) $ax - ay + bx - by$

2. Given the equation $y = 2x^2 - 10x$:

a) Express the relation in factored form.
b) Determine the zeros and the equation of the axis of symmetry.
c) Determine the vertex.