Greatest Common Factor

GCF: The largest number that will divide into <u>all</u> the terms AND the variable(s) that occur in <u>all</u> the terms (raised to the smallest power).

Find the GCF of the following polynomials:

1.
$$14x^3 - 21x^2 + 28x^4$$

2.
$$-16a + 24b + 8a^2$$

Factor the following:

3.
$$8x^2 + 18xy + 2x$$

$$4. -7x^4y - 35x^2y^2 - 14x^2y^5$$

5.
$$7y(3x+9)-14z(3x+9)$$

6.
$$15x(y-3)-5z(3-y)$$