Fully factor the following (remember to use the GREATEST common factor)

1. $12y^2 - 8y + 16$ 2. $15w^3 + 10w^2 - 20w$ 3. $7mn^2 + 28m^2n$
   $= 4(3y^2 - 2y + 4)$ $= 5w(3w^2 + 2w - 4)$ $= 7mn(n+4m)$

4. $144p^4r^2 + 72p^2r^3 - 36pr^2$ 5. $24a^2b^2c^3 + 28ab^3c - 12b^2c^2$
   $= 36pr^2(4p^3 + 2pr - 1)$ $= 4b^2c(6a^2c^2 + 7ab - 3c)$

REMEMBER...FULLY FACTORING REQUIRES USING GREATEST COMMON FACTOR

DIVIDING WITH POLYNOMIALS:

Dividend ÷ Divisor = Quotient

Dividing, as with regular numbers, is the opposite of multiplying. Consider division as breaking the dividend into groups of a certain size, OR breaking the dividend into a certain number of groups...depending on the divisor.

example: $(24x + 8) \div 4 = 6x + 2$ because $4(6x+2) = 24x + 8$

As before, division may be shown horizontally (like above), or as a fraction, like this:

$$\frac{24x + 8}{4} = 6x + 2$$

Try page 355, #4, 6-9, 11 and 12 (just answer using symbols, don't worry about the models for now)...this, of course, becomes homework for tonight. :)