Today's Learning Goal(s):

By the end of the class, I will be able to:

a) factor trinomials of the form $ax^2 + bx + c$

MPM 2DI   5.5 Factor Quadratic Expressions of the Form ax^2 + bx + c (Day 2)

Date: **Apr. 28/16**

Ex.1   Factor fully, if possible.

a) $15x^2 + 41x + 28$ M · 420   b) $15x^2 + 11xy - 14y^2$ c) $18x^3 - 102x^2 + 120x$

A: 41

a)
$$= \frac{(15x+20)(15x+21)}{15}$$
$$= \frac{5(3x+4)\,3(5x+7)}{15}$$
$$= (3x+4)(5x+7)$$

b)
$$= \frac{(15x+21y)(15x-10y)}{15}$$
$$= \frac{3(5x+7y)\,5(3x-2y)}{15}$$
$$= (5x+7y)(3x-2y)$$

c)
$$= 6x(3x^2 - 17x + 20)$$
$$= 6x(3x-5)(x-4)$$

$3x^2 - 17x + 20$

$$= \frac{(3x-5)(3x-12)}{3}$$
$$= \frac{(3x-5)\,3(x-4)}{3}$$

1

Ex.1   Factor fully, if possible.   *Other Method*

a) $15x^2 + 41x + 28$ b) $15x^2 + 11xy - 14y^2$ c) $18x^3 - 102x^2 + 120x$

$$= 6(3x^3 - 17x^2 + 20x)$$

$$= 6x(3x^2 - 17x + 20)$$

$$= 6x(1x - 4)(3x - 5)$$

13   1,20
       2 10
       4 5

$(1x - 4)$

$(3x - 5)$

$= -5 - 12$

$= -17$

$$x^2 + 3x + 2$$

$$= (x+1)(x+2)$$

$$x^{10} + 3x^5 + 2$$

$$= (x^5 + 1)(x^5 + 2)$$

$$x^{40} + 3x^{20} + 2$$

$$= (x^{20} + 1)(x^{20} + 2)$$

Today's entertainment: pp.246-247 #5abc, 6abc, 11
                    Enrichment: p. 247 #15, 19

Hand in Homework

Apr. 21

5.3 Common Factors

Apr. 25

5.4 Trinomials