Unit test ch. 8/9:

· First school day after Wed. 12/17 First school day after that -SKILLS TESTS

Factoring polynomials:

(if present) $3x^{2}y + 12xy^{3}$ $-4x^{3} - 8x + 12$ $3xy(x+4y^2)$ $-4(x^2+2x-3)$ $-\chi^2-\lambda_{X-1}$ $-(X_g+g^{x+1})$

(2) Look for special patterns:

$$a^{2}x^{2} + 2abx + b^{2} = (ax + b)^{2}$$

$$4x^{2} + 24x + 36 = (2x + 6)^{2}$$

$$a^{2}x^{3} - b^{2} = (ax + b)(ax - b)$$

$$9x^{2} - 49 = (3x + 7)(3x - 7)$$

3) Break down trinomials into binomial factors.

$$\alpha x^2 + bx + c = (x + p)(x + q)$$

$$ax^{2}+bx+c=(x+)(x+)$$

 $ax^{2}-bx+c=(x-)(x-)$

$$\frac{\partial x^2 - \beta x - c}{\partial x^2} = (x + \chi x - \chi)$$

$$3x^2$$
 5 possibilities middle $x,3x$ $1,5$ $(x+1)(3x+5)$ $8x$ $(x+5)(3x+1)$ $16x$

Steps to solving polynomial equations:

① Make sure the equation =
$$0$$

 $ax^2 - bx = c$
 $ax^2 - bx - c = 0$

$$4x^{2}-5x=6$$

 -6 -6
 $4x^{2}-5x-6=0$

(2) Factor the polynomial
$$4x^2-5x-6=0$$

$$\frac{4x^{2}}{x,4x} - \frac{6}{1,6} \qquad \frac{p_{655}}{(x-1)(4x+6)} \qquad \frac{middle}{2x}$$

$$2x,2x - 2x,3 \qquad \frac{(x+6)(4x-1)x}{(x-2)(4x+3)} - 5x$$

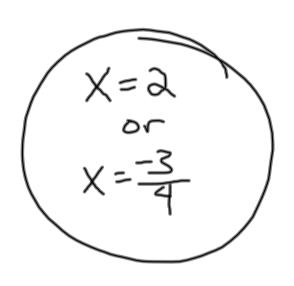
$$-5x \qquad \frac{(x+2)(4x-2)}{(x+3)(4x-2)} \qquad \frac{(x+3)(4x-2)}{(x+1)(4x-6)} \qquad \frac{(x+1)(4x-6)}{(2x-1)(2x+6)}$$

$$(2x-1)(2x+6) \qquad \frac{(2x+2)(2x-3)}{(2x+2)(2x-6)}$$

Set each of the binomial factors = 0 and solve:

$$(4x+3)(x-2)$$

$$4x+3=0$$
 $x-2=0$ $4x=-3$ $x=\frac{3}{4}$



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Homework Test Practice:
P. 616 7-11 (odd)
p. 617 13-21 (every 4th)
p 618 35-41 (011)
P. 619 43-47 (028)
 optional practice- finish W.S. #2
                  P. 621 1-31 (0dd)
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