# MORE EXAMPLES...

1) $5x(2x^2-5)$

$= 10x^3 - 25x$

2) $(4x-3y^3)(2x-y^2)$

$= 8x^2 - 4xy^2 - 6xy^3 + 3y^5$

3) $2(7w^2-w)-3w(w+1)-1(w^2-4w+2)$

$= 14w^2 - 2w - 3w^2 - 3w - w^2 + 4w - 2$

$= 10w^2 - w - 2$

4) $(3w-2)^2$ version!

$(3w-2)(3w-2)$

$9w^2 - 6w - 6w + 4$

$= 9w^2 - 12w + 4$

Shortcut

$(3w-2)^2$

$= 9w^2 - 12w + 4$

5) $5(4w+3)^2$

$5(16w^2+24w+9)$

$= 80w^2 + 120w + 45$

Now the grand finale!!!

- Put it all together to expand and simplify

$$(x+3)(2x-5)+2(x-1)^2-(2x+3)(4x-1)$$

$2x^2-5x+6x-15+2(x^2-2x+1)-(8x^2-2x+12x-3)$

$2x^2-5x+6x-15+2x^2-4x+2-8x^2+2x-12x+3$

$=-4x^2-13x-10$

$$(x+7)(1-3x)-(2x-5)^2-2(3x+1)(5-x)$$

$$x-3x^2+7-21x-(4x^2-20x+25)-2(15x-3x^2+5-x)$$

$$x-3x^2+7-21x-4x^2+20x-25-30x+6x^2-10+2x$$

$$=-x^2-28x-28$$

Practice for tonight....