polynomial	classify (monomial, binomial, trinomial)	degree (highest exponent)	variable	coefficient[s] (# in front of var is the coef)	constant[s]
a) $4x^2$	monomial	2	x	4	none
b) $b-3$	binomial	1	b	1	-3
c) $4x^2-7x+2$	trinomial	2	x	4, -7	2
d) x^2-7	binomial	2	x	1	-7
e) $3x^2-x+2$	trinomial	2	x	3, -1	2

Write in descending order

[highest degree to lowest]

a) $-3+8x$

$8x-3$

~~$8x-3$~~

b) $-4r+6r^2-3r^3+7$

$-3r^3+6r^2-4r+7$

Group and Simplify the following. Classify the polynomial in your final answer.

Ques. $-3x + 5 - 3x - 8 - 4 + 8x$

Group $-3x \; -3x \; +8x \; -8+5-4$

Simplify $2x - 7$

$-7 + 2x$

Group/Simplify

Ques $3 - 4r + 6r^2 - 3r^2 + 4r - 10$

Group $6r^2 - 3r^2 - 4r + 4r + 3 - 10$

Simplify $3r^2 - 7$ $3r + 0 - 7$

degree - 2
coefficient 3

Simplifying polynomials with more than one variable...

$$4xy - y^2 - 3x + 2xy - x - 3y^2$$

Group $-y^2 \; -3y^2 \; +4xy \; +2xy \; -3x \; -x$

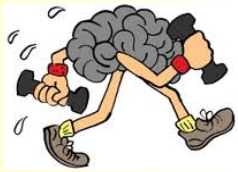
Simplify $-4y^2 + 6xy - 4x$

Are these like terms $(3)(4) = 12$, $(4)(3) = 12$

a) $2xy$, $-3yx$ yes

b) $2x^2y$, $-3xy^2$ NO

Group then simplify



$$3rs + 4r^2 - 8sr + 3s - 10r^2 - 7s$$

Group $4r^2 - 10r^2 - 8sr + 3sr + 3s - 7s$

simplify $-6r^2 - 5rs - 4s$ ←

$-6r^2 - 4s - 5sr$ ✓

Group / Simplify

$$-5y^2r - 3x + 4y^2r - 8x + 11x^2 - 15x^2$$

$$-5y^2r + 4y^2r + 11x^2 - 15x^2 - 3x - 8x$$

$$-y^2r - 4x^2 - 11x$$

$$-4x^2 - 1y^2r - 11x$$

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#13[a,c,e]#14, # 15

Question, Group, Simplify

Quiz Tomorrow on Section 5.1 and 5.2