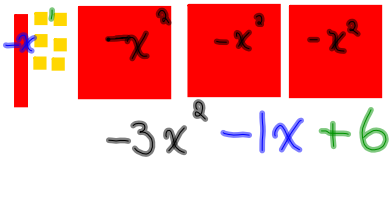
Warm Up

Feb. 6, 2011

Write the polynomial for the following algebra tiles.

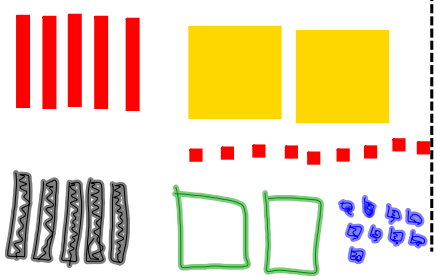


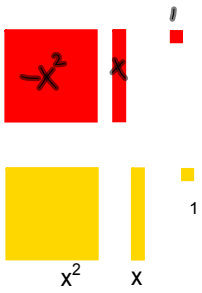
$-3x^2 - 1x + 6$

Trinomial

Model the following Polynomial

$-5x + 2x^2 - 9$





Homework Solutions

5. **a)** Trinomial; it has three terms of different degrees.
b) Binomial; it has two terms of different degrees.
c) Monomial: it has only one term of degree 1.
d) Monomial: it has only one term of degree 0.

6. **a)** Coefficient: −7: variable: x: degree: 1
b) Coefficient: 14; variable: a; degree: 2
c) Coefficient: 1; variable: m; degree: 1
d) No coefficient; no variable; degree: 0

7. **a)** 2 **b)** 1
c) 2 **d)** 0

9. **a)** Coefficients: 5, −6; variable: x; degree: 2; constant term: 2
b) Coefficient: 7; variable: b; degree: 1; constant term: −8
c) Coefficient: 12; variable: c; degree: 2; constant term: 2
d) Coefficient: 12; variable: m; degree: 1
e) No coefficients; no variable; degree: 0; constant term: 18
f) Coefficients: 5, −8; variable: x; degree: 2; constant term: 3

11. **a)**

b)

c)

d)

d)

e)

f)

12. **a)** B **b)** D
c) E **d)** A
e) C

13. **a)** −16; monomial **b)** $x - 8$; binomial
c) $4x$; monomial **d)** $2x^2 - 8x + 3$; trinomial
e) $-5t + 5$; binomial **f)** $5x^2$; monomial
g) $-2x^2 + 2x - 3$; trinomial
h) $-3x^2 + 8$; binomial

14a) degree 1, with 2 terms

$m^1 + 100$

degree is largest exponent on a letter

terms are separated by + or −

b) degree zero, with 1 term

10

c) degree 2 w 1 term

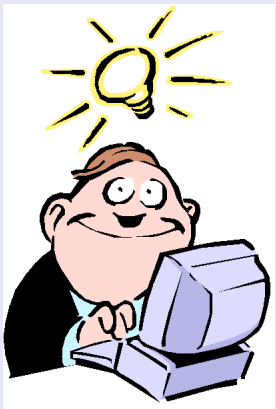
$5a^2$

Assign Books

Mrs. O'Keefe's school web page:

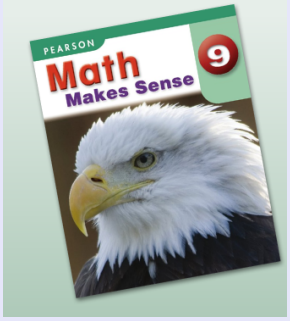
http://jmh.nbed.nb.ca/

Homework and Notes



Text book link:

http://www.mathmakessense.ca/



- click on web books "login"
- click on "Math Makes Sense 9"
- user name: jamesmhill_student

password: student2010

Class Outline

Section 5.2

Like Terms & Unlike Terms

What do the following pairs of integers all have in common?

-1, 1

-2, 2

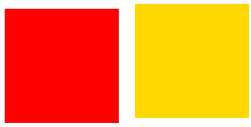
-100, 100

-15, 15

Hint:
What happens when you add them?

Zero

What do you think happens when a "x^2" tile and a "$-x^2$" tile combine?



They form a zero pair

Answer

$-1+1=0$

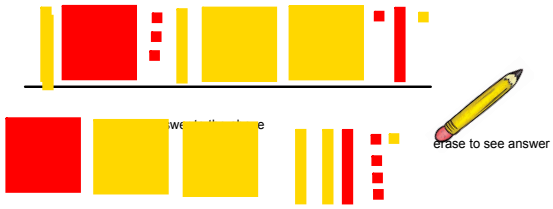
$-x^2+x^2=0$

TILES

Like Terms:

are algebra tiles with the same shape and size (Don't worry about colour ⟶signs)

Here is a collection of tiles, lets group them together into "like terms".



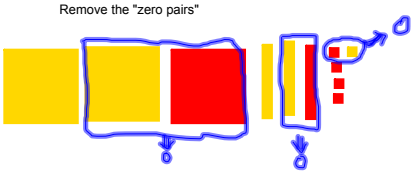
erase to see answer

Always collect like terms

Once you collected like terms you have to simplify the tiles

HOW????

Remove the "zero pairs"



Copy what is left over

See see it from the on line textbook

$1x^2+1x-3$

Polynomial Expressions

-In ad 3n

Like terms are $-3x^2$ and $4x^2$ (same letter with the same numerical exponent)

Unlike Terms are $-x^2$ and x (either different letters and/or different numerical exponent)
are y^2 and t^2

Simplified Form

*fewest algebra tiles possible
*contains only one term of each degree and no terms with a zero coefficient

Always simplify any polynomial by grouping like terms.

$3x-3x=0x$ ← Don't do $3x-3x=0$

Simplify the following polynomial

Example: ~~$-3x + 2x^2 - 7 + 10x + 5 - 4x^2$~~

Step 1) Group like terms

Always start with the largest exponent

$2x^2 - 4x^2 - 3x + 10x - 7 + 5$

Step 2) Combine like terms

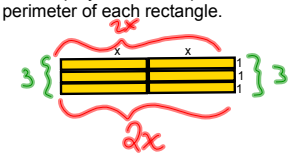
$-2x^2 + 7x - 2$

Ex) 3+4h+h+7

Ex) $4x^2 + 4x^3 + 2x^2$

Perimeter - is the distance around an object
- to calculate you add the length of each side

Write a polynomial to represent the perimeter of each rectangle.



$2x + 2x + 3 + 3$

$4x + 6$

Example 2) Write a polynomial to represent the perimeter of each rectangle.

Example 3) Use algebra tile to make the rectangle with perimeter 6x + 4

Homework

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6
#7
#8(write the simplified expression...You don't have to draw them out)
#9
#12(a, d, f)
#13(a, d, f)
#14(b, c, f)
#17
#19 (a,b)

12a) $2m + 4 - 3m - 8$

$2m - 3m + 4 - 8$

$-1m - 4$

Attachments

Course Outline Grade 9 2010-2011 Second Semester.docx