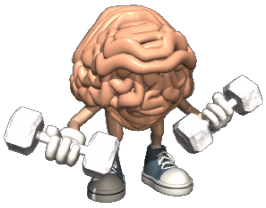
Warm Up



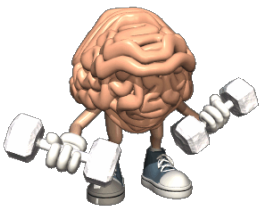
Collect like terms and then simplify the following polynomial

1) $-14x^3 + 17x - 13 + 9x^3 - 6x - 13$

$-14x^3 + 9x^3 + 17x - 6x - 13 - 13$

$-5x^3 + 11x - 26$

Warm Up



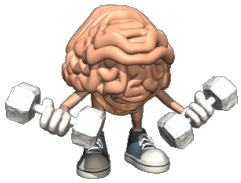
Collect like terms and then simplify the following polynomial

2) $-3n^2 - 3mn + 12mn + 5n^2 + 8m^2 + 3n^2 - 5mn - 7m^2$

$-3n^2 + 5n^2 + 3n^2 + 8m^2 - 7m^2 - 3mn + 12mn - 5mn$

$5n^2 + m^2 + 4mn$

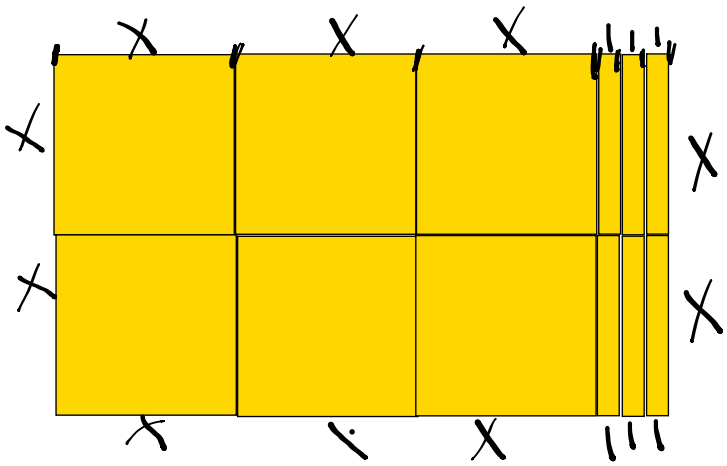
Warm Up



Collect like terms and then simplify the following polynomial

$10x + 6$

3) Determine the perimeter of the following shape



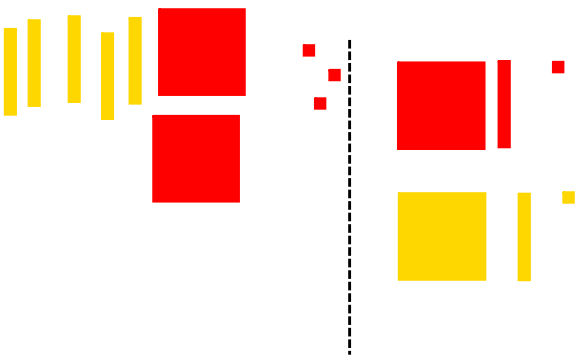
Warm Up

4) Write the polynomial for the following algebra tiles.

$-2x + 4$

5) Model the following Polynomial

$5x - 2x^2 - 3$



last Nights Homework

Any Questions???

Section 5.3
Adding Polynomials

Day 1

Determine the sum of $6x^2 + 2x + 9$ and $-3x^2 + 4x - 5$

When we write the sum of two polynomials, we write each polynomial in brackets:

$$(6x^2 + 2x + 9) + (-3x^2 + 4x - 5)$$

$6x^2 + 2x + 9 - 3x^2 + 4x - 5$

$6x^2 - 3x^2 + 2x + 4x + 9 - 5$

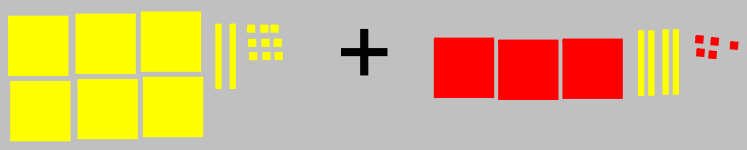
$3x^2 + 6x + 4$

Tiles

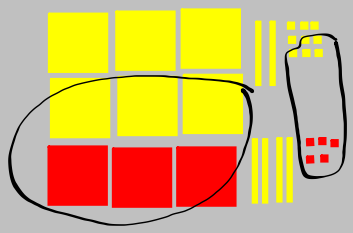
copy down

We can solve the question with tiles.

$(6x^2 + 2x + 9) + (-3x^2 + 4x - 5)$



Combine the displays. (Group like Tiles)



Remove Zero Pairs.

The remaining tiles represent

$3x^2 + 6x + 4$

No Tiles

We often do them without algebra tiles

$(6x^2 + 2x + 9) + (-3x^2 + 4x - 5)$

Drop brackets

$6x^2 + 2x + 9 - 3x^2 + 4x - 5$

$6x^2 - 3x^2 + 2x + 4x + 9 - 5$

$3x^2 + 6x + 4$

Copy

Adding Polynomials Without Tiles

understand +1 in front of second bracket so distribute through

Add: (5c - 11) + (-4c² + c +7)

$5c-11-4c^2+c+7$

$-4c^2+5c+c-11+7$

$-4c^2+6c-4$

Method 1:

Add horizontally:

(5c - 11) + (-4c² + c + 7) Remove the brackets.

= 5c - 11 - 4c² + c + 7 Group like terms.

= -4c² + 5c + c - 11 + 7 Combine like terms by adding their coefficients (remember that c has a coefficient of 1!)

= -4c² + 6c - 4

Method 2:

Add vertically. Line up the like terms, then add their coefficients.

$$\begin{array}{r} 5c - 11 \\ +\ -4c^2 + c + 7 \\ \hline -4c^2 + 6c - 4 \end{array}$$

So, (5c - 11) + (-4c² + c +7) = -4c² + 6c - 4

Class/Homework

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3 - Write the sum of polynomials
4) MUST USE ALGEBRA TILES
5) NO algebra tiles
6)
8)
9)

Attachments

POLYNOMIALS Take 2 Solutions (HW).pdf