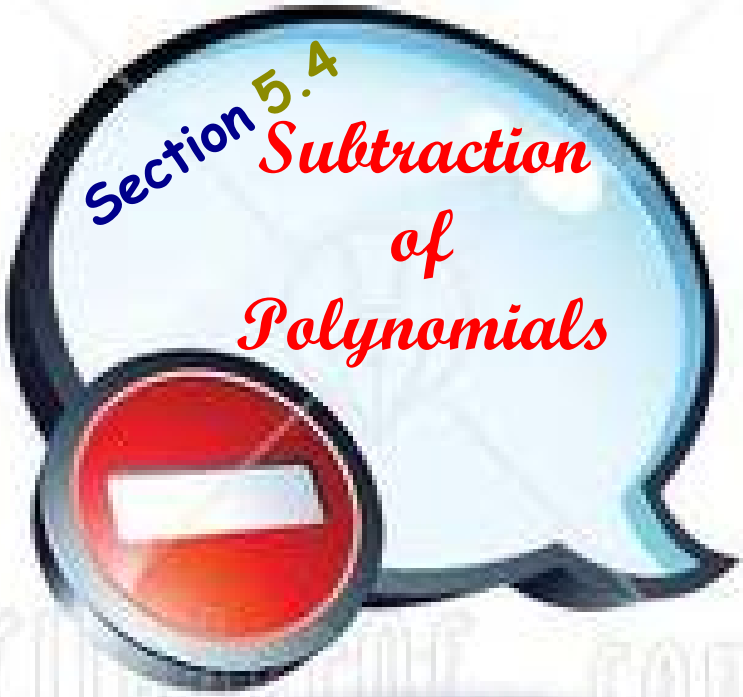
Curriculum Outcome

- (PR 5)Demonstrate an understanding of polynomials (limited to of degree less than or equal to 2).
- (PR 6) Model, record and explain the operations of addition and subtraction of polynomial expressions, concretely, pictorially and symbolically (limited to polynomials of degree less than or equal to 2).
- (PR 7) Model, record and explain the operations of multiplication and division of polynomial expressions (limited to polynomials of degree less than or equal to 2) by monomials, concretely, pictorially and symbolically.

Student Friendly:
“Subtracting Polynomials "

Warm Up

Quiz


Section 5.4
Subtraction of Polynomials

Things you already know...

$18 - 5 =$ 13

$12 + (-5) =$ 17

$15x - 31x =$ $-16x$

$-16 + (-11) =$ -5

$(5x - 11) - (3x - 6)$

Method: 1

Carry Through

$5x - 11 - 3x + 6$

$5x - 3x \quad -11 + 6$

$2x - 5$

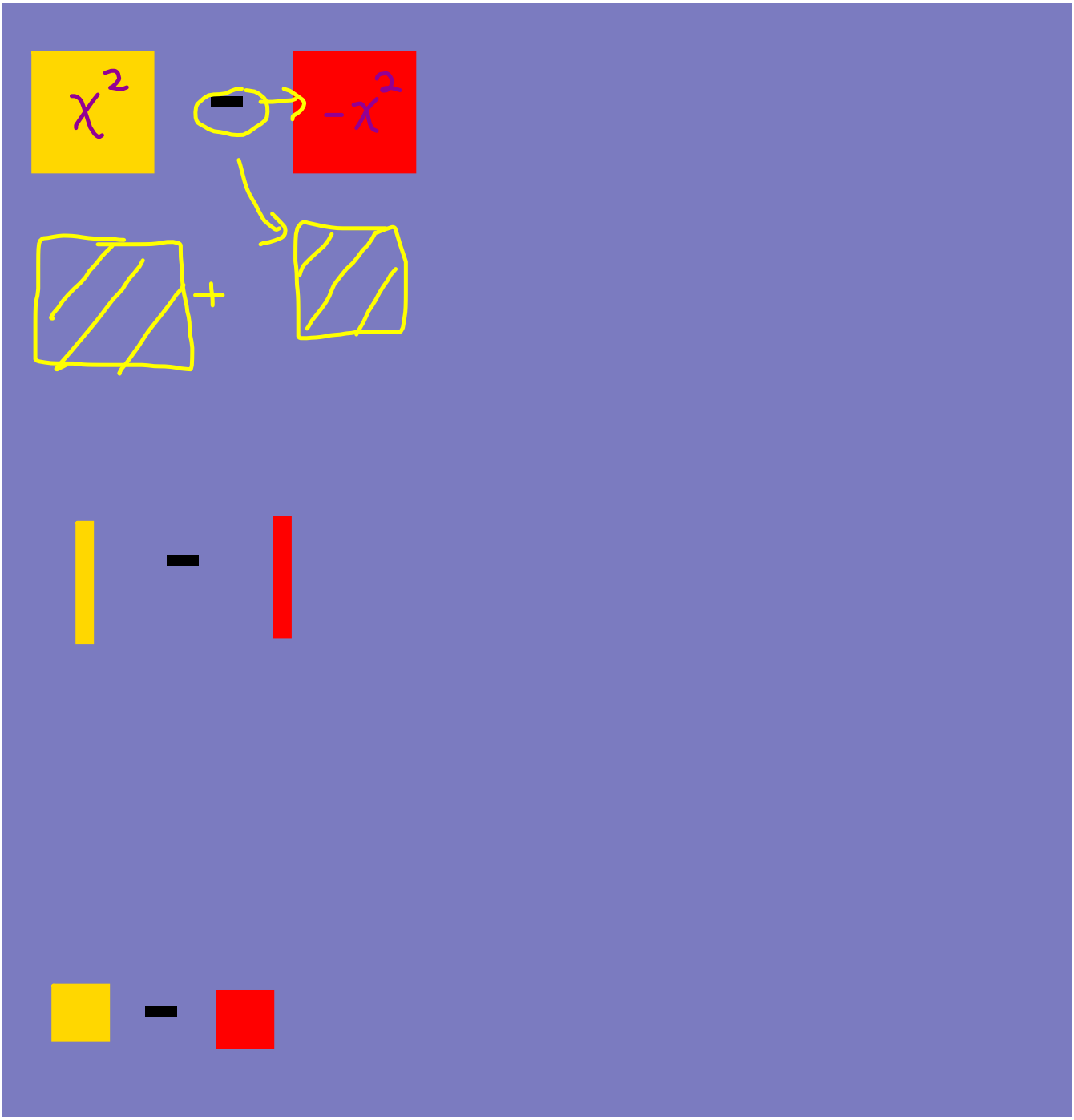
$(5x - 11) + (-3x + 6)$

Method: 2

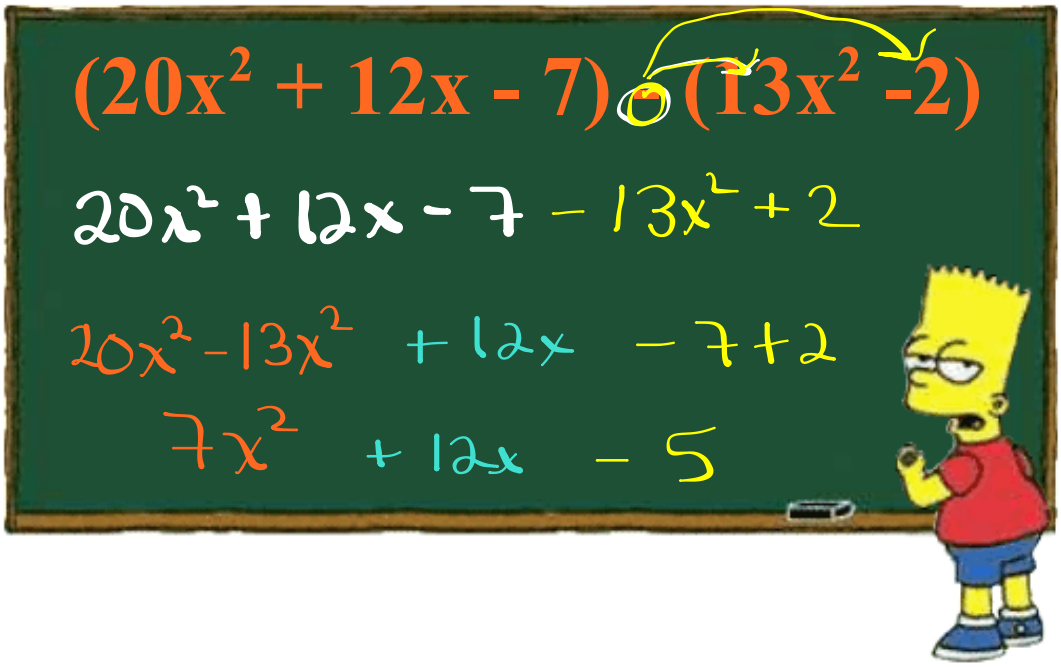
Add the Opposite!

$5x - 3x \quad -11 + 6$

$2x \quad -5$


x^2
$-x^2$

You Try



Try This!

$(6x^2-4x+2)-(-8x^2-9x+2)$

$6x^2 - 4x + 2 \quad +8x^2 \quad +9x \quad -2$

$6x^2 + 8x^2 \quad -4x + 9x \quad +2 - 2$

$14x^2 \quad + 5x$

Example 3.

The height of a ball kicked on Earth can be modelled by: $18 + 35t - 4.9t^2$
On Mars the height is modelled by: $52 + 26t - 1.3t^2$
Find a formula for the difference in the height of the ball on Mars as compared to Earth.

Mars - Earth

$(52 + 26t - 1.3t^2) - (18 + 35t - 4.9t^2)$

$52 + 26t - 1.3t^2 - 18 - 35t + 4.9t^2$

$4.9t^2 - 1.3t^2 + 26t - 35t - 18 + 52$

$$3.6t^2 - 9t + 34$$

$t = 10$

$$3.6t^2 - 9t + 34$$

$3.6(10)^2 - 9(10) + 34$

Class/Homework

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(No algebra tiles just combine like terms and subtract)

#7ac
#8 aceh
#10