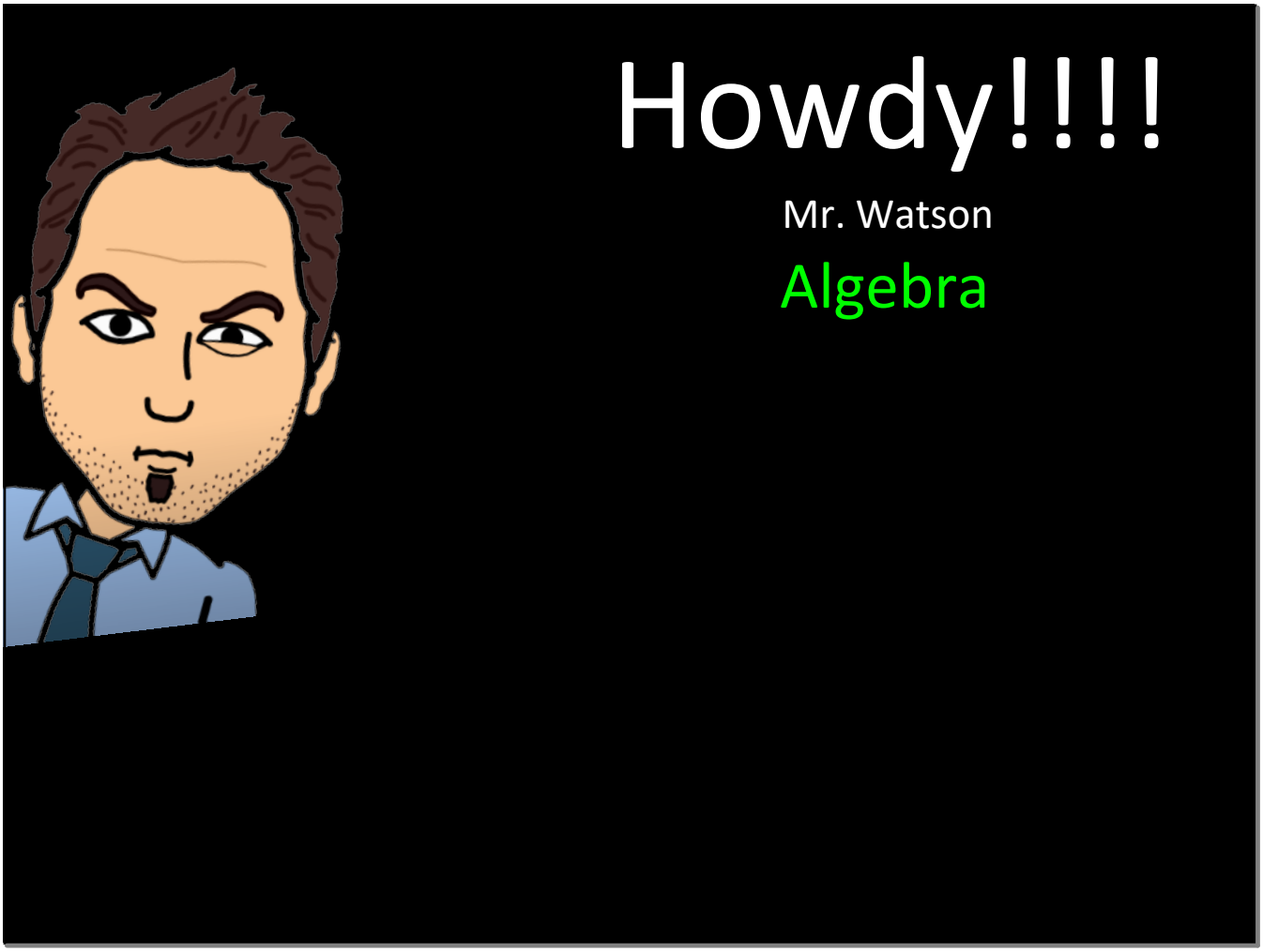


Jan 5-3:51 PM

Radical Review

$4\sqrt{27x^3y^2}$

$4\sqrt{9}\,3\,x\,x\,\sqrt{y}\,y$

$12xy\sqrt{3x}$

$\sqrt{14}\cdot 6\sqrt{2}$

$6\sqrt{28}$

$6\sqrt{4}\,\sqrt{7}$

$12\sqrt{7}$

$2\sqrt{45}-2\sqrt{5}$

$2\sqrt{9}\,\sqrt{5}$

$6\sqrt{5}-2\sqrt{5}$

$4\sqrt{5}$

$\sqrt{7}\left(3-2\sqrt{7}\right)$

$3\sqrt{7}-2\sqrt{49}$

$3\sqrt{7}-14$

Feb 28-8:39 AM

Rational/Irrational?

$\sqrt{25}$ R Perfect Square	$\sqrt{3}\left(\sqrt{3}+2\right)$ $\sqrt{9}+2\sqrt{3}$ $3+2\sqrt{3}$ I not P.S.
$2.689312...$ I non terminating	3.14 R terminating
$6\frac{1}{8}$ R Fraction	$\sqrt{30}$ I not Perfect

① $-4\sqrt{216x^2y^2z}$

$-4\sqrt{36 \cdot 6 \cdot x^2 \cdot y^2 \cdot z}$

$-24xy\sqrt{6z}$

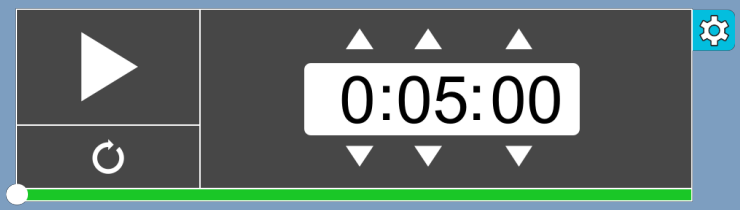
② $12\sqrt{24} + 16\sqrt{54} - 6\sqrt{6}$

$12\sqrt{4 \cdot 6} \quad 16\sqrt{9 \cdot 6}$

$24\sqrt{6} + 48\sqrt{6} - 6\sqrt{6} = 66\sqrt{6}$

③ $5\sqrt{42x}\left(4 + 4\sqrt{7x}\right)$

QUIZ



Feb 26-4:02 PM

B

#2 $3\sqrt{20a^1b^9c^4}$

A

#1 $4\sqrt{18a^6b^1c^{11}}$

Adding + and - Subtracting Polynomials

Sep 8-9:31 AM

Adding Polynomials

When adding, use the following steps to add polynomials:

- Line up like terms
- Add
- Make sure final answer is in standard form

a. $(4x^2 + 2x + 8) + (8x^2 + 3x + 1)$

$12x^2 + 5x + 9$

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

$-4x^2 + 4x + 14$

c. $(5 - 2x + x^2 + 7) + (3x^2 + 7 - 4x)$

$4x^2 - 6x + 19$

d. $(2x^3 + x^2 - 5) + (2x + x^3)$

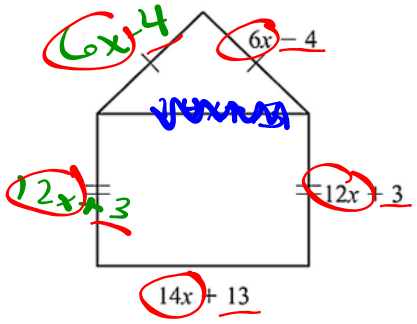
Application: Find an expression that represents the perimeter of the house.

What does it mean to find the perimeter of an object?

add up all sides

Perimeter of the house:

$50x + 11$



1

Subtracting Polynomials

Subtracting polynomials is similar to adding polynomials except we have to take care of the minus sign first. Subtracting polynomials require the following steps:

- Change the subtraction sign to addition and distribute the negative sign to every term in the 2nd polynomial.
- Line up like terms
- Add (Make sure final answer is in standard form)

① Rewrite 1st 2nd
② Change signs
③ CLT

a. $(7x^2 - 2x + 1) - (-3x^2 + 4x - 7)$

$7x^2 - 2x + 1 + 3x^2 - 4x + 7$

$10x^2 - 6x + 8$

b. $(3x^2 + 5x) - (4x^2 + 7x - 1)$

$3x^2 + 5x - 4x^2 - 7x + 1$

$-x^2 - 2x + 1$

c. $(5x^3 - 4x + 8) - (-2 + 3x)$

$5x^3 - 4x + 8 + 2 - 3x$

$5x^3 - 7x + 10$

d. $(3 - 5x + 3x^2) - (-x + 2x^2 - 4)$

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

$1x^2 - 4x + 7$

e. $(8x + x^3 - 6) - (-10x + 7 - 2x^3 + 5x^2)$

f. $(-7x^2 + 8x - 4) - (2 - 14x^2)$

2

Practice

Sep 8-9:39 AM

Algebra 1 Polynomials and Radicals Practice

Day 4 – Adding and Subtracting Polynomials **Name:** _____

Practice Assignment **Date:** _____ **Block:** _____

1. Classify the polynomials by degree and number of terms.

a. $4x^2 - 5x$ b. $x + 2$ c. 12 d. $5x^2 - 5x + 1$

e. $2x + 3x^2 - 4x$ f. $x^2 - 2x + 9 - x^2$ g. $4x^3 - 2x + 2x^2 - 2x + 5$

2. Add the following polynomials. Make sure your final answer is in standard form.

a. $(5x^2 - 4x + 7) + (8x^2 - 3x - 9)$ b. $(4x + 5x^2 + 8) + (-2x^2 + 8)$

3. Subtract the following polynomials. Make sure your final answer is in standard form.

a. $(2x - 4) - (5x + 7)$ b. $(3x^2 - 3x - 5) - (2x^2 + x - 6)$

c. $(4x^2 + 3x - 10) - (-4x^2 + 2x + 8)$ d. $(14x - 3x^2 + 2) - (3x + 4x^2 - 5)$

4. Determine the missing values of m and n.

a. $4x^2 + 2x + 8) + (mx^2 + nx + 4) = 7x^2 + 5x + 4$

b. $(mx^2 - 8x + 3) - (6x^2 + nx - 4) = -2x^2 - 5x + 7$

$4 + m = 7$

$m = 3$

$2 - n = -5$

$-2 \quad -2$

$-n = -7$

$\frac{-n}{-1} = \frac{-7}{-1}$

$n = 7$