HELLO

#1 check/correct hw with solutions

& #2 PLEASE PICK UP the WARM UP

REMINDER:

test will be ~~Wed, Nov 9~~ TUES, Nov. 7th

1

$$\frac{2a}{(a+3)} \cdot \frac{a^2}{a^2} + \frac{(a)\,1\,(a+3)}{(a)\,a\,(a+3)} + \frac{2\,(a+3)}{a^2(a+3)}$$

$$\frac{2a^3 + a^2 + 3a + 2a + 6}{a^2(a+3)} \implies \frac{2a^3 + a^2 + 5a + 6}{a^2(a+3)}$$

2

$$\sqrt{9a^2b} = \sqrt{9} \cdot \sqrt{a^2} \cdot \sqrt{b}$$

$$\boxed{3a\sqrt{b}}$$

$$\sqrt{18} = \sqrt{9}\sqrt{2}$$

$$\sqrt{27ab^2} \qquad \sqrt{27} \cdot \sqrt{a} \cdot \sqrt{b^2} \qquad \boxed{3b\sqrt{3a}}$$

$$\sqrt{9} \cdot \sqrt{3} \; \sqrt{a} \quad b$$

$$3\sqrt{3} \cdot \sqrt{a} \cdot b \qquad 3a\sqrt{}$$

4
9
16

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3   solve the inequality two different ways:

1).boundary point method

2). solve directly for x

$$-5 \leq -2x-15$$
$$+15 \qquad\qquad +15$$

$$-5 \leq -2(-6)-15$$
$$12-15$$
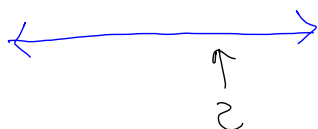$$-5 \leq -3$$

$$\frac{10}{-2} \leq \frac{-2x}{-2}$$

$$-5 \geq x$$

$$\boxed{x \leq -5}$$

-5 ≤ -2x-15

change to =

$5 = -2x - 15$

∴ boundary point $x = ^-5$

$x \le ^-5$

$-5 \qquad 0$

TEST $X = 1$

$-5 \le -2(1) - 15$

$-5 \le -2 - 15$

$-5 \le -17$

false

Add & Subtract

Rational

Expressions

a different process than + or -

3 LEVEL

$$\frac{(x-5)}{(x-5)(3x+1)} \cdot \frac{x}{3x+1} + \frac{2x^2-2}{(x-5)(3x+1)}$$

need common denom.

$$\frac{\overbrace{x(x-5)} + 2x^2-2}{(x-5)(3x+1)}$$

$$\frac{x^2-5x+2x^2-2}{(x-5)(3x+1)}$$

$$\frac{3x^2-5x-2}{(x-5)(3x+1)}$$

$$\Downarrow$$

$$\frac{(3x+1)(x-2)}{(x-5)(3x+1)}$$

$$\frac{x-2}{x-5}$$

$$\frac{x}{3x+1} \qquad + \qquad \frac{2x^2-2}{(x-5)(3x+1)}$$

$$\frac{3x^2 - 5x - 2}{(x \bullet - 5)(3x + 1)} \qquad \text{FACTOR}$$

$$\frac{(3x+1)(x-2)}{(x-5)(3x+1)}$$

Box method:

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

$$-6x^2$$
$$1x \times -6x$$
$$-5x$$

$$\frac{3x^2 - 5x - 2}{(x \bullet - 5)(3x + 1)}$$

$$\frac{(3x+1)(x-2)}{(x-5)(3x+1)}$$

d

November 01, 2017

sweet**HOT POTAT**o

__every team needs:__

1 pencil per group
& one paper

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sweet**HOT POTAT**o

person with pencil = writer

team members = explainers, you must tell the writer exactly how to complete a step.

the <u>writer</u> only writes what the team tells them to write.

the teacher will tell you when to switch writers

the new writer then starts where the last one finished and only doing what the rest of the team says.

then switch again when the teacher says, and continue with the process above.

Ⓐ

$$\frac{9-3x}{(x+3)(x-3)} \quad + \quad \frac{2x}{x+3}$$

Ⓐ $\frac{9-3x}{(x+3)(x-3)} \quad + \quad \frac{2x}{x+3}$ $9-3x = 3(3-x) = -3(x-3)$

EQUIVALENT EXP● TRICK

$$\frac{-3(x-3)}{(x+3)(x-3)} \quad + \quad \frac{2x}{x+3}$$

$$\frac{-3}{(x+3)} \quad + \quad \frac{2x●}{x+3} \quad \longrightarrow \quad \boxed{\frac{2x-3}{x+3}}$$

B

$$\frac{2x-1}{3x^2+13x+4} \quad + \quad \frac{x+3}{x^2-3x-28}$$

B $\frac{2x-1}{3x^2+13x+4}$ + $\frac{x+3}{x^2-3x-28}$ FACTOR FIRST!•

$$\frac{2x-1}{(x+4)(3x+1)} \quad + \quad \frac{x+3}{(x-7)(x+4)}$$

$$\frac{(2x-1)(x-7)}{(x+4)(3x+1)(x-7)} \quad + \quad \frac{(x+3)(3x+1)}{(x-7)(x+4)(3x+1)}$$

$$\frac{(\quad)(\quad) + (\quad)(\quad)}{(\quad)(\quad)(\quad)}$$

$$\frac{(x-7)(2x-1) \; + \; \cdot(x+3)(3x+1)}{(x-7)(x+4)(3x+1)}$$

$$\frac{2x^2 - 15x + 7 + 3x^2 + 10x + 3}{(x-7)(x+4)(3x+1)}$$

$$\frac{5x^2 - 5x + 10}{(x-7)(x+4)(3x+1)}$$

Assignment

3 ... 103, 104cd,
105, 106, 107ab, 108, 109

GREAT JOB TODAY!

if you want extra practice with multiplying/ dividing
... then do **104** and **107cd**