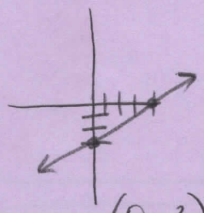
Name College Alg 1-1-1-4 Review Date

PARTNER MATH

A Graph Each Equation Show the x & y intercepts state slope

1) $y = \frac{3}{4}x - 3$

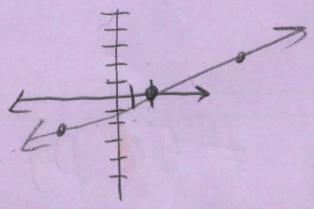


$m = \frac{3}{4}$ (0,-3) (4,0)

2) $4x - 5y = 8$

x	y
0	$-\frac{8}{5}$
2	0

$m = \frac{4}{5}$



B Pg. 203 Solve completly Show Work #20 State Conditional, inconsistent or an Identity

$2x - 4(5x+1) = 3x + 17$

$2x - 20x - 4 = 3x + 17$

$-18x - 4 = 3x + 17$

$+18x \quad +18x$

$-4 = 21x + 17$

$-17 \quad -17$

$\frac{-21}{21} = \frac{21x}{21}$

$x = -1$ ★

Conditional

Check

$-2 - 4(-4) = -3$

$-2 + 16 = 14$

$14 = 14$

C Pg. 203 Solve Show Work State Conditional, Inconsistent or Identity #31

Conditional

$\frac{5}{x+3} + \frac{1}{x-2} = \frac{8}{x^2+x-6}$ → factor

$3, -2$ | 6 | 1

get common den

$\frac{5(x-2)}{(x+3)(x-2)} + \frac{1(x+3)}{(x-2)(x+3)} = \frac{8}{(x+3)(x-2)}$

$\frac{5x-10}{(x+3)(x-2)} + \frac{(x+3)}{(x+3)(x-2)} = \frac{8}{(x+3)(x-2)}$

Bust But Common den

$5x - 10 + x + 3 = 8$

$6x - 7 = 8$

$+7 \quad +7$

$\frac{6x}{6} = \frac{15}{6}$

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

D Pg. 203 Same Directions #32

$\frac{1}{x+5} = \frac{0(x+5)}{1(x+5)}$ (common den)

$\frac{1}{x+5} = \frac{0}{x+5}$ because $1 \neq 0$

$1 \neq 0$

No Solution Inconsistent $\emptyset$ { }

E Do Your 4 Steps #38 pg. 204

① x = # text Mesages

Plan 1: $15 Monthly, $.05 per text

Plan 2: $5 Monthly, $.07 per text

② $15 + .05x = 5 + .07x$

③ $-.05x \quad -.05x$

$15 = 5 + .02x$

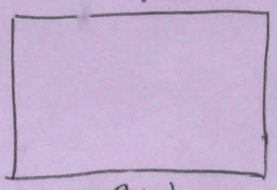
$-5 \quad -5$

$\frac{10}{.02} = \frac{.02x}{.02}$

$500 = x$

④ If you text 500 times plan 1 will cost the same as plan 2.

F #43 pg. 135

① 

$P = 300$

② $2W + 2W + W + W = 30$

③ $\frac{6W}{6} = \frac{300}{6}$

$W = 50$

④ The Soccer field is 50ft by 100ft

G #10 pg. 133

$X + 24$

$X = 1^{st}$ #

$X + 24 = 2^{nd}$ #

Sum 58

$X + X + 24 = 58$

$2X + 24 = 58$

$-24 \quad -24$

$\frac{2X}{2} = \frac{34}{2}$

$X = 17$

First # is 17

second # is 41.

Check $17 + 41 = 58$ ★

H # 48 pg. 204

$(8 - 3i) - (17 - 7i)$

$-9 + 4i$

I # 49 pg. 204

$4i(3i - 2)$

$12i^2 - 8i$

$i^2 = -1$

$-12 - 8i$

J # 51 pg. 204

$(3 - 4i)^2$

$(3 - 4i)(3 - 4i)$

$9 - 12i - 12i + 16i^2$

$i^2 = -1$, $16(-1) = -16$

$-5 - 24i$

K # 53 pg. 204 **CHALLENGE**

$\frac{6}{(5+i)} \cdot \frac{(5-i)}{(5-i)}$

$\frac{30 - 6i}{25 - 5i + 5i - i^2}$

$i^2 = -1$, $-(-1) = +1$

$\frac{30 + 6i}{26}$

$\frac{30}{26} + \frac{6i}{26}$

$\frac{15}{13} + \frac{3i}{13}$

$\frac{15 + 3i}{13}$

L #55 pg. 204 **CHALLENGE**

$\sqrt{-32} - \sqrt{-18}$

$\sqrt{-16}\sqrt{2} - \sqrt{-9} \cdot \sqrt{2}$

$4i\sqrt{2} - 3i\sqrt{2}$ ← like terms

$1i\sqrt{2}$