Today's Plan:

Learning Target (standard): I will review for the semester exam.

Students will: Complete practice problems over previous concepts at the boards and study for my exam.

Teacher will: Provide practice problems over previous concepts, check homework problems for accuarcy and provide students feedback, describe and provide examples of exam problems.

Assessment: Board work

Differentiation: Students will work at the board, actively engage in practice review concepts with the aid of other students and the teacher.

ANSWER KEY #75

BELL RINGER

1.) Determine whether the relation is a function. Explain.
(5,4), (3,2), (-2,2), (4, 5)
Yes it is a function. Every input has one output.

2.) Rewrite 90% as a decimal and fraction in lowest terms.
0.9, 9/10

3.) Evaluate the expression $\frac{a+b}{2}$ when a = 4 and b = -9. -5/2 or -2 1/2

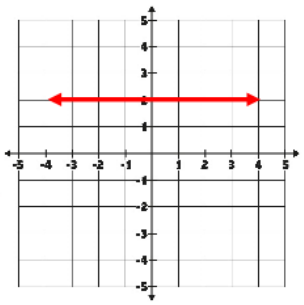
ANSWER KEY #76

BELL RINGER

1.) Find the y-intercept of the equation x + 3y = 4. (0, 4/3)

2.) Solve the equation 2(x - 1) = -3x + 4.
x = 6/5 or 1 1/5

3.) Graph the line y = 2.



Write the standard form of the equation of the line described.

27) through: $(1, -2)$, parallel to $y = -2x - 2$ $m = -2$

28) through: $(-3, -5)$, perp. to $y = \frac{4}{9}x + 3$ $m = -\frac{4}{9}$

Parallel: $m_1 = m_2$

$(1, -2)$, $m_{\parallel} = -2$

$y = mx + b$

$-2 = -2(1) + b$

$-2 = -2 + b$

$b = 0$

$y = -2x$

$2x + y = 0$

Standard form

Perpendicular: $m_1 = -\frac{1}{m_2}$

$m_{\perp} = \frac{9}{4}$; $(-3, -5)$

$y = mx + b$

$-5 = \frac{9}{4}(-3) + b$

$-5 = -\frac{27}{4} + b$

$b = \frac{7}{4}$

$4\left(y = \frac{9}{4}x + \frac{7}{4}\right)$

$4y = 9x + 7$

$-9x + 4y = 7$

Standard form

Solve each system by substitution.

29) $x - 4y = 3$
$-5x + 8y = -15$

$x = 4y + 3$

$-5(4y+3) + 8y = -15$

$-20y - 15 + 8y = -15$

$-12y - 15 = -15$

$-12y = 0$

$y = 0$

$x = 4(0) + 3$

independent
(3, 0)

30) $3x + 3y = 9$
$-8x - 4y = -4$

independent: (-2, 5)

$-4y = 8x - 4$

$y = -2x + 1$

$3x + 3(-2x+1) = 9$

$3x - 6x + 3 = 9$

$-3x + 3 = 9$

$-3x = 6$

$x = -2$

$y = 4 + 1$

Solve each system by graphing.

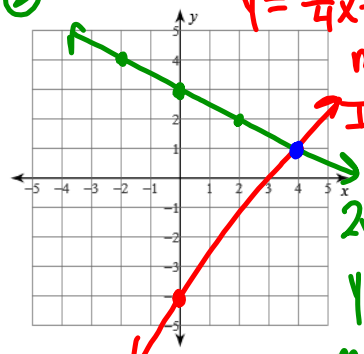
31) ① $5x - 4y = 16$
② $x + 2y = 6$

$-4y = -5x + 16$

$y = \frac{5}{4}x - 4$

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

$I_y: (0, -4)$



$2y = -x + 6$

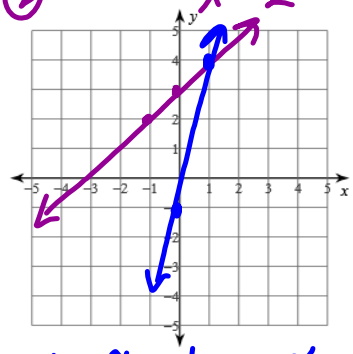
$y = -\frac{1}{2}x + 3$

$m = -\frac{1}{2}$

$I_y: (0, 3)$

independent
(4, 1)

32) ① $5x - y = 1$
② $x - y = -3$



$-y = -5x + 1$

$y = 5x - 1$

$m = 5$

$I_y: (0, -1)$

independent
(1, 4)

$y = -x - 3$

$y = x + 3$

$m = 1$

$I_y: (0, 3)$

Solve each system by elimination.

33) $14x - 4y = -22$
$-2(7x - 10y = 29)$

$14x - 4y = -22$

$-14x + 20y = -58$

$16y = -80$

$y = -5$

independent
(-3, -5)

$7x + 50 = 29$

$7x = -21$

$x = -3$

34) $9(10x + 9y = 11)$
$10(-9x + 7y = -25)$

$90x + 81y = 99$

$-90x + 70y = -250$

$151y = -151$

$y = -1$

independent
(2, -1)

$10x - 9 = 11$

$10x = 20$

$x = 2$

Solve each system by elimination.

33) $14x - 4y = -22$
$(7x - 10y = 29)-2$

$14x - 4y = -22$
$-14x + 20y = -58$
$16y = -80$
$y = -5$

$7x + 50 = 29$
$7x = -21$
$x = -3$

independent
$(-3, -5)$

34) $(10x + 9y = 11)9$
$(-9x + 7y = -25)10$

$90x + 81y = 99$
$-90x + 70y = -250$
$151y = -151$
$y = -1$

$-9x - 7 = -25$
$-9x = -18$
$x = 2$

independent
$(2, -1)$