Name: _____ Week of: _____

ALGEBRA SPIRAL REVIEW

Sketch a graph for the situation? (on the back)
- the height of a sunflower over a summer.
- the number of vehicles that enter a school parking lot during 1 day
- the number of customers in a restaurant each hour of one day

Find the range of each function when the domain is $(-4, 0, 1, 5)$.

$y = 4x - 7$ $m = 0.5n + 3$

Is the relation a function?

x	y
0	$\frac{2}{3}$
1	$\frac{3}{4}$
2	

Model each rule with a table of values and a graph. (graph on back)

$f(x) = x^2 - 3$ $f(x) = \frac{1}{2}x - 3$

$y = |x| - 7$

Find the slope.

$(4,3)(3,8)$

Graph each equation.

$x - 4y = 8$ $y = \frac{1}{3}x + 2$

Write each equation in slope intercept form.

$-7y = 8x - 3$ $5x + 4y = 100$

Find the x and y intercepts

$3x + 4y = -24$ $-5x + 10y = 60$

Write an equation in point-slope form.

slope $= \frac{8}{3}$, $(-2, -7)$

slope $= -\frac{1}{2}$, $(0, 3)$

$(4, 9)(-2, -6)$ $(5, -8)(-9, -8)$

Write an equation in slope-intercept form for a parallel line.

$y = 5$; $(-3, 6)$

Write an equation in slope-intercept form for a perpendicular line.

$x = -7$; $(0, 2)$

Write an equation of a trend line for the number of districts and the year. (Using a graphing calc)

Year	Districts
1967	21.8
1972	15.8
1977	15.2
1982	14.9
1987	14.7
1992	14.4
1997	13.7

Is $(-1, 5)$ a solution of the system? Explain.

$x + y = 4$ $y = -x + 4$

$x = -1$ $y = -\frac{1}{5}x$

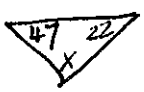
Solve by graphing.

$y = x + 2$ $y = 4$

$y = -2x + 2$ $y = 5x$

Solve.

$-9 + p = 12$ $0.7 + y = -1.34$



$7x = 35$

Solve.

$1.1x + 1.2x - 5.4 = -10$

$\frac{2}{3}h - \frac{1}{3}h + 11 = 8$

$6(5 - 8v) + 12 = -54$

Solve.

$-24 - \frac{1}{8}p = \frac{3}{8}p$

$12(2w - 3) = 6w$

$2(n - 3) = 4n + 1$