Name: _____ Week of: _____
ALGEBRA SPIRAL REVIEW
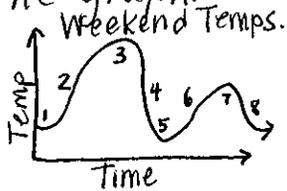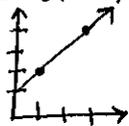
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Label each section of the graph. Weekend Temps. Sketch a graph for your distance from the ground as you ride a ferris wheel for five minutes.	Use a mapping diagram to determine if the relation is a function. $[(6,-7),(4,2),(1,1),(0,0)(1,-1)]$ Use a vertical line test to determine if the relation is a function. $[(3,-1),(-2,3),(-1,-5)(3,2)]$	Find the range of the function rule $y=5x-2$. $[(0.5,11)]$ $[(-1.2),(0.4)]$ Model each rule with a table. $f(x)= 8-x$ $y=5+4x$ $y=|x|+2$
Write a function rule for the table. 	X	f(x)	 	1	5	 	2	6	 	3	7	 	4	8	 	X	Y	 	1	1	 	3	9	 	6	36	 	9	81	 Find the rate of change.	Find the slope. $(3,2),(5,6)$ $(-3,1),(3,-5)$ $(-4,4),(2,-5)$ Write an equation in slope intercept form. $m=\frac{1}{2}, b=3$ $m=0, b=1$ Graph each equation. $y=-5x+2$ $y=-\frac{4}{5}x+4$ $y=2x+5$ $y=\frac{2}{3}x-3$	Find the x and y intercepts. $-5x+y=30$ $4x+12y=-18$ Write each equation in standard form. $y=3x+1$ $y=4x-7$ $y=\frac{1}{2}x-3$ $y=\frac{2}{5}x+5$ Graph each equation. $-3x+2y=-6$ $x+y=1$ $2x-3y=18$ $y-x=-4$
Write each equation in point-slope form. $(0,2); m=\frac{4}{5}$ $(-2,-7); m=-\frac{3}{2}$ $(4,-2),(9,-8)$ $(6,4),(-3,5)$ Graph each equation. $y-2=-\frac{3}{2}(x-3)$ $y+5=-(x-2)$ $y+1=\frac{2}{3}(x+4)$ $y-1=-3(x+2)$	Write an equation of a line that parallel. $y=3x ; (3,0)$ $y=-2x+3 ; (-3,5)$ Write an equation of a line that is perpendicular. $y=2x+7; (0,0)$ $y=-\frac{1}{3}x+2 ; (4,2)$	Use a graphing calculator to find the equation of a line of best fit. 	Latitude	0	10	20	30	40	50	 	Temp.	79.2	80.1	71.5	68.7	57.4	42.4	 Solve the equations by graphing. $y=x+2$ $y=x$ $y=-2x+2$ $y=5x$ Is $(-1,5)$ a solution for the system? $y=2x+7$ $y=x+6$
Solve each system using substitution. $y=4x-8$ $m=5p+8$ $y=2x+10$ $m=-10p+3$ $a-1.2b=-3$ $0.2b+0.6a=12$	Solve each system using elimination. $2x+5y=17$ $7x+2y=10$ $6x-5y=-9$ $-7x+y=-16$ $3x-10y=-25$ $x-8y=18$ $4x+40y=20$ $-16x+16y=-8$ $3x+2y=-9$ $-10x+5y=-5$	Model the word problem with a linear function. Four friends go bowling. For each person, it costs $2.50 to rent shoes and $2.00 per game.