What are we learning in the Algebra Concepts Chapter 13? **Please indicate how you feel about the required topics in this unit. **

Objective	Example	Answer	Rating		
Interpret and apply any of the vocabulary	 x-intercept • y-intercept • slope • perpendicular • parallel • median • altitude • point slope form • standard form • slope intercept form • vertical line • horizontal line • undefined slope • distance 		0 0 8		
Graph a line from any form	a. Graph $y = -\frac{5}{2}x + 7$ b. Graph $5x - 6y = -60$ c. Graph $y - 4 = \frac{1}{3}(x + 2)$	-10 -8 -6 -4 -2 2 4 6 8 10 -10 -8 -6 -4 -2 2 4 6 8 10 -10 -8 -6 -4 -2 -2 - 2 4 6 8 10 -10 -8 -6 -4 -2 -2 - 2 - 4 6 8 10 -10 -8 -6 -4 -2 -2 - 2 - 4 6 8 10	0 9 8		
Write an equation of a line in any form	 a. Write the equation of the line through (-2,3) and (8,-5). b. Write the equation of the line perpendicular to 5x-6y = -60 and through (-4,17). c. Write the equation of the line parallel to y-4 = 1/3(x+2) and through the x-intercept of 5x-6y = -60. 	a. $y+5 = -\frac{4}{5}(x-8)$ or $y-3 = -\frac{4}{5}(x+2)$ b. $y-17 = -\frac{6}{5}(x+4)$ c. $y-0 = \frac{1}{3}(x+12)$	0 0 8		
Solve a system of equations that has multiple solutions	Solve for x and y: $ \begin{cases} (x-3)^2 + (y+5)^2 = 49 \\ y = 3x - 4 \end{cases} $	$\left(\frac{\sqrt{390}}{10}, \frac{3\sqrt{390}}{10} - 4\right) \text{ and} \\ \left(-\frac{\sqrt{390}}{10}, -\frac{3\sqrt{390}}{10} - 4\right)$	0 9 8		
Write an equation of a median in a triangle	Triangle ABC has coordinates A(-1,-3), B(2,10), and C(5,4). Write an equation for the median from C.	$y - \frac{7}{2} = \frac{1}{9} \left(x - \frac{1}{2} \right)$ or $y - 4 = \frac{1}{9} \left(x - 5 \right)$	0 9 8		

Find the length of an altitude of a triangle	Triangle ABC has coordinates A(1,-8), B(2,10), and C(5,4). Find the length of the altitude from B.	$\frac{3\sqrt{10}}{2}$	٢	٢	8
Compute the distance between two lines	Find the distance between $y = \frac{1}{3}x + 4$ and $y = \frac{1}{3}x + 6$.	$\frac{3\sqrt{10}}{5}$	٢	٢	3
Complete the square to write the equation of a circle in standard form	Write the standard form equation of the circle $x^2 + y^2 - 16x - 6y = 62$ and identify the center and radius.	$(x - 8)^{2} + (y - 3)^{2} = 135$ Center: (8,3) Radius = $3\sqrt{15}$	٢	٢	3
Find the length of the common internal or external tangents	Find the length of the common external tangent between the two circles $(x-4)^2 + (y+3)^2 = 36$ and $(x+1)^2 + (y-5)^2 = 9$.		٢		Ö