

# ALG 2 Chapter 3 summary classwork - Answer Key

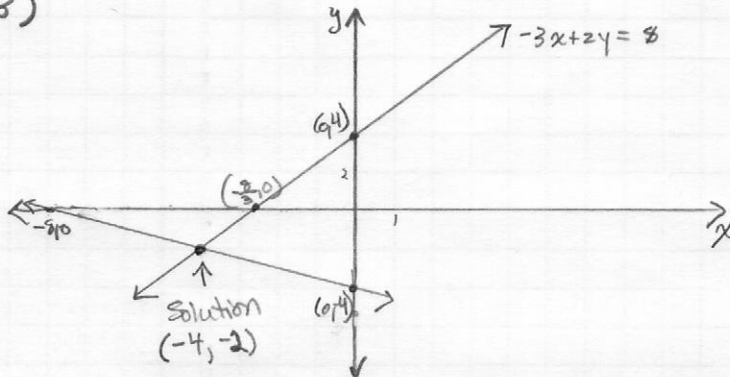
1) a)  $(-4, -2)$     b)  $(2, -3)$     c)  $(2, -1)$

2) a) many solutions; same line

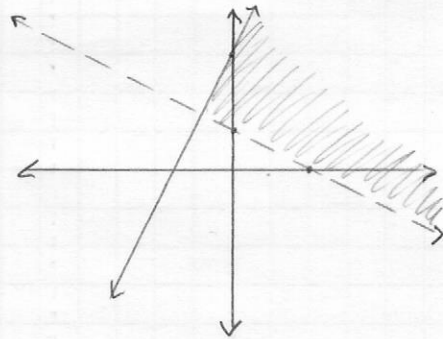
b) No solution; parallel lines

c) one solution; intersecting lines

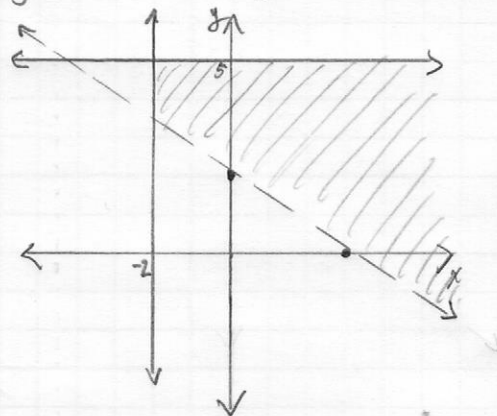
3)



4) a)  $2x - y \geq -3 \Rightarrow 2x - y = -3 \Rightarrow y = 2x + 3$  (solid)  
 $y > -\frac{1}{2}x + 1 \Rightarrow y = -\frac{1}{2}x + 1$  (dotted)



b)  $2x + 3y > 6 \Rightarrow 2x + 3y = 6 \Rightarrow 3y = -2x + 6 \Rightarrow y = -\frac{2}{3}x + 2$  (dotted)  
 $x \geq -2 \Rightarrow x = -2$  (solid)  
 $y \leq 5 \Rightarrow y = 5$  (solid)



5)  $(3, 3, 1)$