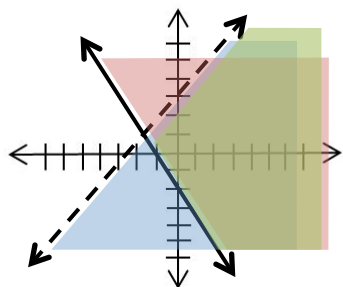


Algebra II Homework #9 – Answer Key

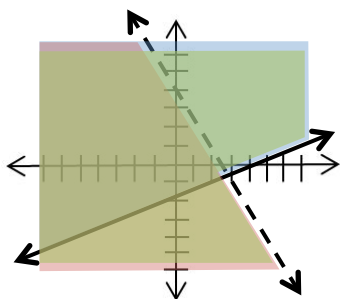
1) Natalie's age = 14, Nina's age = 16, Angela's age = 13

2) $y < \frac{4}{3}x + 3, y \geq \frac{-2}{1}x - 2$ *The green shading on the graph is the final answer*



3) Joshua = 9mph, River = 6mph

4) $y \geq \frac{1}{3}x - 2, y < \frac{-3}{2}x + 4$ *The green shading on the graph is the final answer*

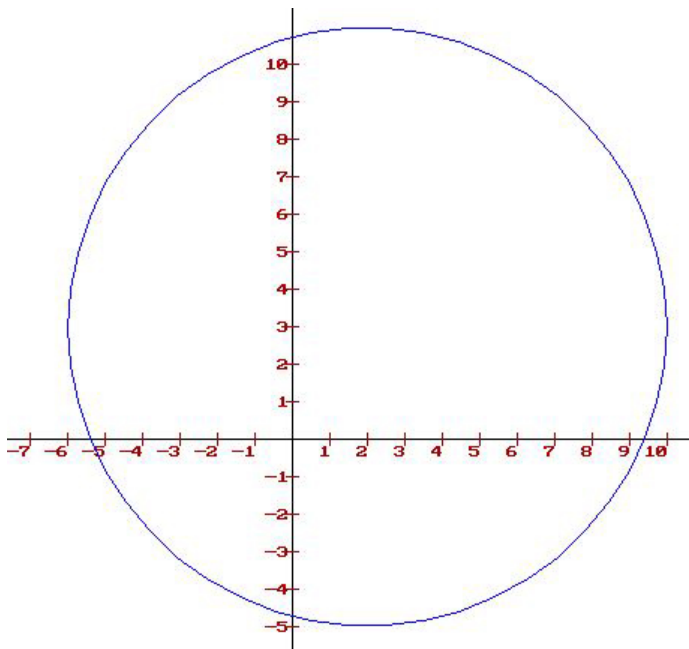


5) 13 Nickels
5 Dimes
17 Quarters

6) $y = -\frac{(x-7)}{2} - 5$

7) $(x+1)^2 + (y-7)^2 = 32$

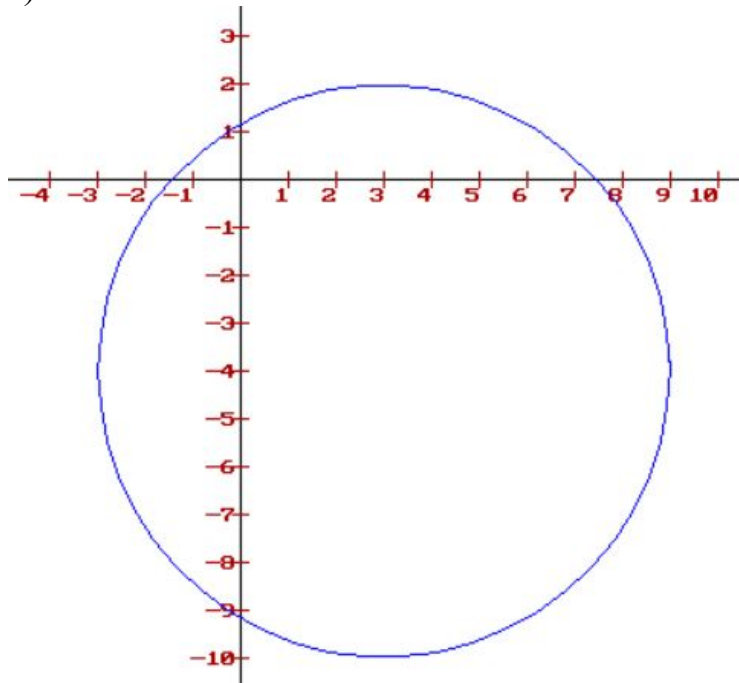
8) Center = (2, 3) Diameter = 16



9) $y = -(x+5)^2 + 6$

10) $(x-1)^2 + (y+5)^2 = 34$

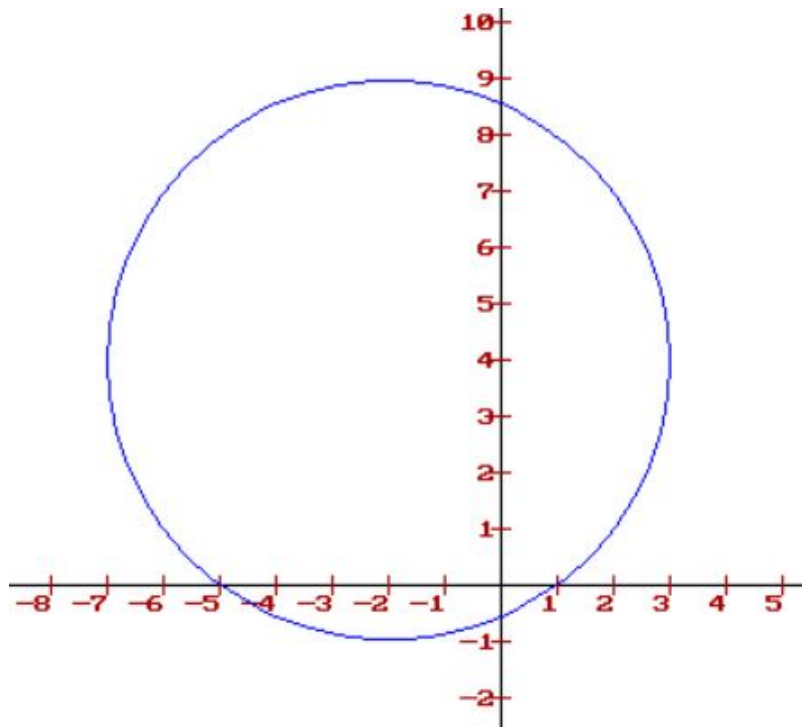
11) Center = (3, -4) Radius = 6



12) $y = 3|x-7| - 4$

13) $(x-3)^2 + (y-4)^2 = 50$

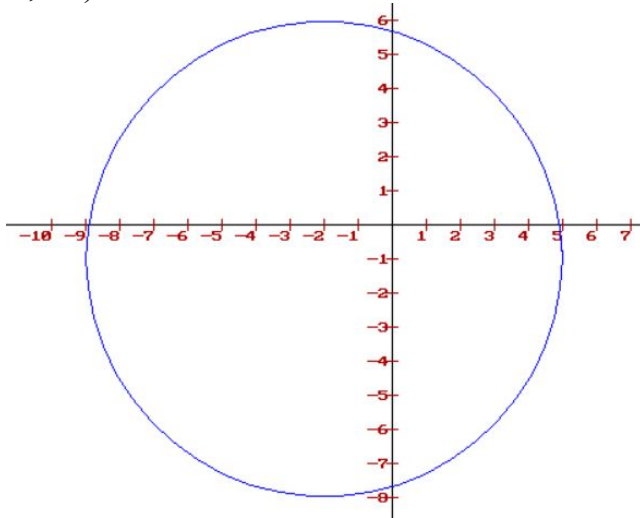
14) Center = (-2, 4) Radius = 5



15) $y = \frac{-(x+2)^3}{4} - 8$

16) $(x+6)^2 + (y-3)^2 = 17$

17) Center = $(-2, -1)$ Radius = 7



18) $y = -5(x-6)^2 + 2$

19) $(x+8)^2 + (y+3)^2 = 153$

20) $y = -|x+7| - 3$