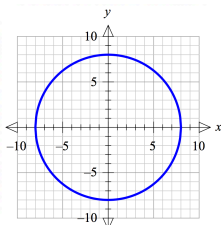
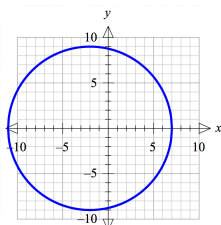


SM2H 6.1 Circles Answer Key

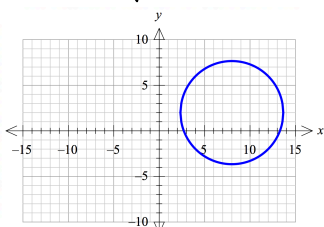
1. center: (0, 0)  
radius: 8



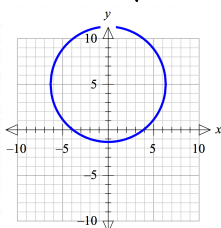
2. center: (-2, 0)  
radius: 9



3. center: (8, 2)  
radius:  $4\sqrt{2}$



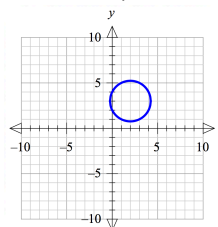
4. center: (0, 5)  
radius:  $2\sqrt{10}$



5. center: (2, -4)  
radius: 5  
equation:  $(x - 2)^2 + (y + 4)^2 = 25$
6. center: (0, 0)  
radius: 7  
equation:  $x^2 + y^2 = 49$
7. center: (8, -6)  
radius: 10  
equation:  $(x - 8)^2 + (y + 6)^2 = 100$
8. center: (3, -2)  
radius: 4  
equation:  $(x - 3)^2 + (y + 2)^2 = 16$

9. center: (-2, -7)  
radius:  $\frac{\sqrt{10}}{2}$   
equation:  $(x + 2)^2 + (y + 7)^2 = \frac{5}{2}$

10. (-2, 1)  
11. (1, 9)  
12.  $\sqrt{296} \approx 17.20$   
13. same problem as #12 ☺  
14. center: (0, 4)  
radius:  $\sqrt{13}$   
equation:  $x^2 + (y - 4)^2 = 13$
15. center: (-1, -15)  
radius: 4  
equation:  $(x + 1)^2 + (y + 15)^2 = 16$
16. center: (4, 4)  
radius:  $\sqrt{29}$   
equation:  $(x - 4)^2 + (y - 4)^2 = 29$
17. center: (7, -3)  
radius: 10  
equation:  $(x - 7)^2 + (y + 3)^2 = 100$
18. equation:  $(x - 2)^2 + (y - 3)^2 = 5$   
center: (2, 3)  
radius:  $\sqrt{5}$



19.  $5(3x^4 - 4x^2 + 1)$   
20.  $-6xy(2xy^2 - 6y^3 + 3)$   
21.  $3(x^3 + 3x - 4)$