Prerequisite Chapter Answer Sheet
Honors Math Analysis

Place all answers on this sheet. Attach work.

1. 2. 3. 4. 5. 6. 7. $x | y$
   - 2 3
   - 1 2
   $\frac{1}{2}$ $\frac{3}{4}$
   0 2
   $\frac{1}{2}$ $\frac{3}{4}$
   1 2
   2 1

8. a.

b. $AB = \frac{3}{2}$  BC = 4  AC = 5

c. $(3)^2 + (4)^2 = (5)^2$

9. a. 17  b. $(0, \frac{3}{4})$ c. $-\frac{5\sqrt{2}}{3}$

10. a. 15  b. $(\frac{3}{2}, 2)$ c. $\frac{4}{3}$

11. $x^2 + y^2 = 9$

12. $(x+1)^2 + (y-2)^2 = 5$

13. $(x-3)^2 + (y-4)^2 = 25$

14. $C = (0,0)$  $r = 3$

15. $C = (1, -3)$  $r = 2\sqrt{10}$
16. 

17. 

18. 

19. 

20. \(m = \frac{4}{3}, \quad \text{b} = (0, 3)\) 

21. \(m = \frac{3}{1}, \quad \text{b} = (0, 1)\) 

22. \(m = \emptyset, \quad \text{b} = \emptyset\) 

23. \(y = \frac{2}{3}x + 2\) 

24. \(y = \frac{2}{3}x - \frac{1}{5}\) 

25. \(y = 4\) 

26. \(y = 3x - 3\) 

27. \(x = 6\) 

28. \(y = 4\) 

29a. \(y = 2x - 3\) 

29b. \(y = \frac{1}{2}x + 2\) 

30a. \(y = -\frac{4}{3}x - 3\) 

30b. \(y = 2x - 3\) 

31. \$41,700 

32. 3,014
33. $\frac{-5}{8}$ 34. $\frac{4}{3}$ 35. $-4$ 36. $6$ 37. $4$
38. $5$ 39. $4$ 40. $\frac{16}{25}$ 41. $\pm \frac{3\sqrt{5}}{5}$ 42. $-\frac{1}{2}, -\frac{1}{5}$
43. $\frac{6}{5}$ 44. $-4$ 45. $-\frac{9}{5}$ 46. $-\frac{3}{5}$ 47. $(1, 1)$
48. $(2, 6)$ 49. $-\frac{3}{5}$ 50. $-12, 6$ 51. $-3, 2$
52. _____________ 53. _____________
54. _____________ 55. _____________
56. $x < -\frac{1}{5}$ 57. $-1 < x < 5$
58. $x < -2$ or $x > 2$ 59. $x < -10$ or $x > 0$
60. $-2 < x < 5$ 61. $x \leq -5$ or $x \geq 1$
62. $-1 < x < 7$
63. vertex = $(5, 2)$  y-intercept = $(0, 77)$
64. vertex = $(1, 5)$  y-intercept = $(0, 5)$