

## SM2H 5.1 Conic Sections Answers

- |       |       |       |
|-------|-------|-------|
| 1. H  | 13. P | 25. C |
| 2. P  | 14. C | 26. E |
| 3. C  | 15. C | 27. P |
| 4. P  | 16. P | 28. H |
| 5. C  | 17. H | 29. P |
| 6. P  | 18. E | 30. C |
| 7. H  | 19. H | 31. H |
| 8. E  | 20. P | 32. P |
| 9. P  | 21. H | 33. P |
| 10. H | 22. H | 34. E |
| 11. E | 23. E | 35. C |
| 12. H | 24. P | 36. P |

37. opens: up

Focal width: 6

Vertex: (3, -10)

40. center: (0, 0)

a= 2

b= 5

axis: vertical

43. center: (0, 0)

a= 13

b= 12

axis: horizontal

46. center: (-2, 3)

radius: 2

38. Opens: right

Focal width:  $\frac{1}{2}$

Vertex: (12, -17)

41. center: (-1, 0)

a= 10

b= 7

axis: horizontal

44. center: (-2, 6)

a=  $\sqrt{30}$

b=  $\sqrt{20} = 2\sqrt{5}$

axis: vertical

47. center: (0, -19)

radius:  $3\sqrt{2}$

39. Opens: down

Focal width: 2

Vertex: (3, 10)

42. Center: (10, -1)

a=  $\sqrt{3}$

b=  $\sqrt{2}$

axis: horizontal

45. Center: (7, -4)

a= 4

b=  $\sqrt{2}$

axis: vertical

42. Center: (0, 0)

radius:  $2\sqrt{5}$