

Solutions of Questions from Old Exams

1 Section 7.3

1. π
2. $4\sqrt{2}$
3. (a) $2\sqrt{3}$
(b) $\frac{\pi}{6}$
(c) $\langle 0, 6 \rangle$
4. a
5. (a) $\left\langle \frac{-6\sqrt{13}}{13}, \frac{9\sqrt{13}}{13} \right\rangle$
(b) $\frac{\pi}{4}$
6. $2, \frac{5\pi}{6}$
7. $2, \frac{\pi}{6}$
8. $\frac{5\pi}{3}, 2\sqrt{3}$
9. $-2, 1$
10. $6, \frac{3\pi}{2}$
11. $4, 300^\circ$
12. $\frac{3}{5}$
13. $\left\langle \frac{2\sqrt{13}}{13}, \frac{-3\sqrt{13}}{13} \right\rangle$
14. $2, 120^\circ$
15. $a = \frac{-7\sqrt{2}}{10}$, and $b = \frac{\sqrt{2}}{10}$
16. 135°
17. 3
18. $\frac{2\sqrt{3}}{3}$
19. 42
20. $\frac{\sqrt{2}}{2}$
21. $\left\langle \frac{-2\sqrt{5}}{5}, \frac{\sqrt{5}}{5} \right\rangle$ and $\left\langle \frac{2\sqrt{5}}{5}, \frac{-\sqrt{5}}{5} \right\rangle$
22. d

23. $\frac{3}{4}$

24. $\sqrt{7}$

25. 9

26. e

27. $\langle \sqrt{2}, -\sqrt{2} \rangle$

28. $\langle \sqrt{3}, 1 \rangle$

29. 17, 270°

30. $12\sqrt{3}$, 12

31. $\frac{24}{7}$

32. d

33. c

34. 300°