Sec 10-5, Part II

Written Exercises

Find the distance between each pair of points whose coordinates are given.

13. $(-4, 2), (4, 17)$ **14.** $(5, -1), (11, 7)$ **15.** $(-3, 5), (2, 7)$

16. $(5, 4), (-3, 8)$ **17.** $(-8, -4), (-3, 8)$ **18.** $(2, 7), (10, -4)$

19. $(7, -9), (4, -3)$ **20.** $(9, -2), (3, -6)$ **21.** $(10, 8), (2, -3)$

22. $(11, -2), (-4, 5)$ **23.** $(-2, 5), \left(-\frac{1}{2}, 3\right)$ **24.** $(4, 2), \left(6, -\frac{2}{3}\right)$

25. $\left(\frac{2}{3}, -4\right), (3, -2)$ **26.** $\left(6, -\frac{2}{7}\right), (5, -1)$ **27.** $\left(\frac{4}{5}, -1\right), \left(2, -\frac{1}{2}\right)$

The coordinates of a pair of points are given in each exercise. Find two possible values for a if the points are the given distance apart.

28. $(4, 7), (a, 3); d = 5$ **29.** $(3, a), (-4, 2); d = \sqrt{170}$

30. $(8, 1), (5, a); d = 5$ **31.** $(-3, a), (5, 2); d = 17$

32. $(a, 5), (-7, 3); d = \sqrt{29}$ **33.** $(5, 9), (a, -3); d = 13$

34. $(a, -4), (2, -3); d = \sqrt{65}$ **35.** $(-6, -5), (-3, a); d = \sqrt{13}$

36. $(4, -7), (7, a); d = \sqrt{34}$ **37.** $(-5, a), (4, -2); d = \sqrt{130}$