

WORKSHEET

Find the equation of the line in slope-intercept form given two collinear points.

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| 1. $P_1(3, 11), P_2(14, 1)$ | 13. $P_1(14, 4), P_2(0, 18)$ | 25. $P_1(23, 10), P_2(1, 18)$ |
| 2. $P_1(22, 24), P_2(13, 24)$ | 14. $P_1(9, 16), P_2(6, 16)$ | 26. $P_1(24, 0), P_2(2, 9)$ |
| 3. $P_1(20, 4), P_2(24, 17)$ | 15. $P_1(13, 15), P_2(17, 13)$ | 27. $P_1(6, 23), P_2(13, 14)$ |
| 4. $P_1(11, 1), P_2(4, 21)$ | 16. $P_1(1, 6), P_2(12, 12)$ | 28. $P_1(3, 22), P_2(0, 24)$ |
| 5. $P_1(1, 24), P_2(20, 24)$ | 17. $P_1(10, 2), P_2(17, 5)$ | 29. $P_1(10, 5), P_2(9, 8)$ |
| 6. $P_1(7, 2), P_2(10, 17)$ | 18. $P_1(8, 17), P_2(21, 16)$ | 30. $P_1(18, 11), P_2(22, 8)$ |
| 7. $P_1(5, 24), P_2(22, 22)$ | 19. $P_1(13, 15), P_2(18, 6)$ | 31. $P_1(10, 4), P_2(12, 7)$ |
| 8. $P_1(19, 15), P_2(10, 19)$ | 20. $P_1(24, 4), P_2(20, 7)$ | 32. $P_1(3, 7), P_2(18, 11)$ |
| 9. $P_1(18, 7), P_2(1, 22)$ | 21. $P_1(25, 14), P_2(23, 25)$ | 33. $P_1(24, 22), P_2(6, 12)$ |
| 10. $P_1(13, 13), P_2(16, 17)$ | 22. $P_1(3, 25), P_2(7, 4)$ | 34. $P_1(21, 0), P_2(20, 7)$ |
| 11. $P_1(20, 12), P_2(6, 25)$ | 23. $P_1(1, 17), P_2(2, 7)$ | 35. $P_1(20, 11), P_2(5, 20)$ |
| 12. $P_1(2, 9), P_2(23, 7)$ | 24. $P_1(12, 23), P_2(16, 24)$ | 36. $P_1(11, 17), P_2(0, 0)$ |

— Answers —

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| 1. $y = -\frac{10}{11}x + \frac{151}{11}$ | 13. $y = -x + 18$ | 25. $y = -\frac{4}{11}x + \frac{202}{11}$ |
| 2. $y = 24$ | 14. $y = 16$ | 26. $y = -\frac{9}{22}x + \frac{108}{11}$ |
| 3. $y = \frac{13}{4}x - 61$ | 15. $y = -\frac{1}{2}x + \frac{43}{2}$ | 27. $y = -\frac{9}{7}x + \frac{215}{7}$ |
| 4. $y = -\frac{20}{7}x + \frac{227}{7}$ | 16. $y = \frac{6}{11}x + \frac{60}{11}$ | 28. $y = -\frac{2}{3}x + 24$ |
| 5. $y = 24$ | 17. $y = \frac{3}{7}x - \frac{16}{7}$ | 29. $y = -3x + 35$ |
| 6. $y = 5x - 33$ | 18. $y = -\frac{1}{13}x + \frac{229}{13}$ | 30. $y = -\frac{3}{4}x + \frac{49}{2}$ |
| 7. $y = -\frac{2}{17}x + \frac{418}{17}$ | 19. $y = -\frac{9}{5}x + \frac{192}{5}$ | 31. $y = \frac{3}{2}x - 11$ |
| 8. $y = -\frac{4}{9}x + \frac{211}{9}$ | 20. $y = -\frac{3}{4}x + 22$ | 32. $y = \frac{4}{15}x + \frac{31}{5}$ |
| 9. $y = -\frac{15}{17}x + \frac{389}{17}$ | 21. $y = -\frac{11}{2}x + \frac{303}{2}$ | 33. $y = \frac{5}{9}x + \frac{26}{3}$ |
| 10. $y = \frac{4}{3}x - \frac{13}{3}$ | 22. $y = -\frac{21}{4}x + \frac{163}{4}$ | 34. $y = -7x + 147$ |
| 11. $y = -\frac{13}{14}x + \frac{214}{7}$ | 23. $y = -10x + 27$ | 35. $y = -\frac{3}{5}x + 23$ |
| 12. $y = -\frac{2}{21}x + \frac{193}{21}$ | 24. $y = \frac{1}{4}x + 20$ | 36. $y = \frac{17}{11}x$ |