

WORKSHEET

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

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

— Answers —

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| 1. $y = -\frac{1}{2}x + 3$ | 14. $y = -\frac{1}{4}x + \frac{17}{4}$ | 26. $y = -\frac{5}{2}x - 8$ |
| 2. $y = 7$ | 15. $y = -\frac{5}{19}x + \frac{78}{19}$ | 27. $y = -\frac{7}{8}x + \frac{17}{2}$ |
| 3. $y = -\frac{5}{4}x + \frac{39}{2}$ | 16. $y = -10x + 80$ | 28. $y = x + 12$ |
| 4. $y = \frac{3}{2}x + 19$ | 17. $y = -\frac{2}{17}x + \frac{188}{17}$ | 29. $y = -x - 6$ |
| 5. $y = x + 8$ | 18. $y = \frac{2}{9}x + \frac{74}{9}$ | 30. $y = \frac{1}{10}x + \frac{57}{5}$ |
| 6. $y = -\frac{3}{4}x + \frac{31}{4}$ | 19. $y = \frac{2}{3}x + 4$ | 31. $y = \frac{7}{9}x + \frac{43}{9}$ |
| 7. $y = \frac{3}{2}x - 3$ | 20. $y = \frac{3}{4}x + \frac{17}{2}$ | 32. $y = -\frac{11}{5}x + \frac{137}{5}$ |
| 8. $y = -x + 10$ | 21. $y = \frac{1}{20}x + \frac{18}{5}$ | 33. $y = -\frac{3}{8}x + 4$ |
| 9. $y = \frac{9}{14}x + \frac{73}{14}$ | 22. $y = \frac{7}{8}x + \frac{29}{4}$ | 34. $y = -\frac{4}{3}x - \frac{5}{3}$ |
| 10. $y = 4x + 50$ | 23. $y = -x - 2$ | 35. $y = -\frac{1}{2}x + \frac{13}{2}$ |
| 11. $y = \frac{3}{19}x + \frac{131}{19}$ | 24. $y = 10$ | 36. $y = \frac{1}{22}x + \frac{7}{2}$ |
| 12. $y = -\frac{3}{5}x + \frac{73}{5}$ | 25. $y = -\frac{4}{13}x + \frac{83}{13}$ | |