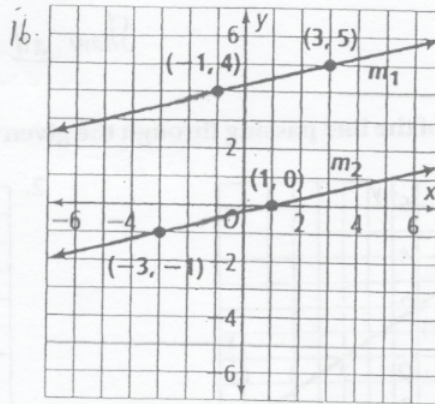
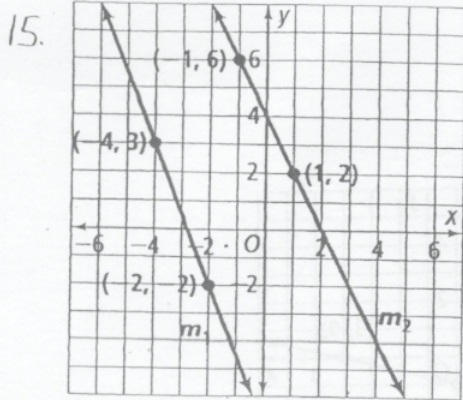


In Exercises 15-16, are lines m_1 and m_2 parallel? Explain.



Write an equation of the line parallel to \overleftrightarrow{AB} that contains point C.

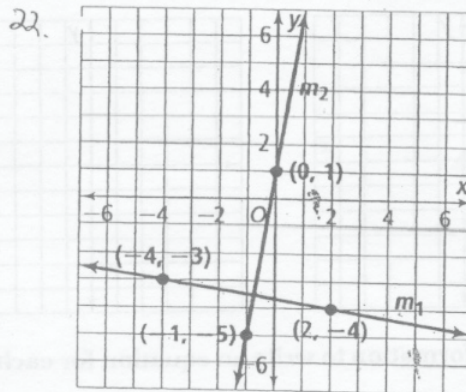
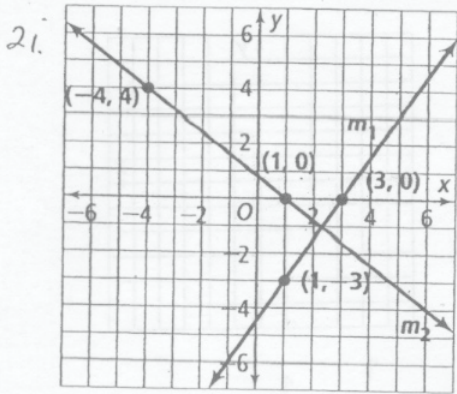
17. $\overleftrightarrow{AB}: y = -5x + 12; C(-2, 1)$

19. $\overleftrightarrow{AB}: y = \frac{4}{7}x + 7\frac{2}{7}; C(7, 1)$

18. $\overleftrightarrow{AB}: y = \frac{1}{5}x + 8\frac{4}{5}; C(3, 6)$

20. $\overleftrightarrow{AB}: y = -\frac{2}{5}x + 5\frac{2}{5}; C(5, -2)$

Exercises 21-22, are lines m_1 and m_2 perpendicular? Explain.



Write an equation of the line perpendicular to the given line that contains P.

23. $P(-6, 5); y = 2x - 3$

25. $P(4, 3); y = -3x - 15$

24. $P(-6, -3); y = x - 1$

26. $P(5, 5); y = \frac{7}{4}x + 11\frac{1}{2}$