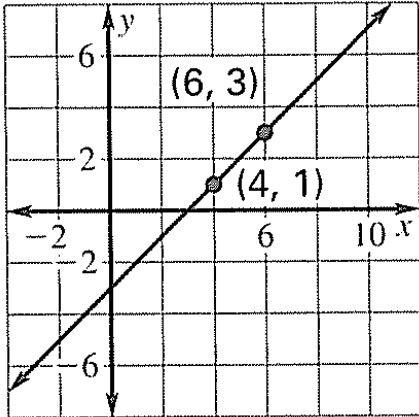


Worksheet 5.3 - Writing Linear Equations Given Two Points – pages 285-291

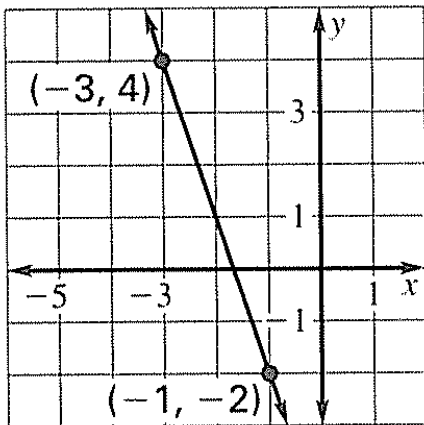
LEVEL 1

Write an equation in slope-intercept form of the line shown in the graph. Show your work.

1) _____



2) _____



LEVEL 2

Write an equation in slope-intercept form of the line that passes through the points. Show your work.

3) (4, 2) (3, 5)

4) (-7, 9) (-5, -3)

5) (-1, 10) (12, -4)

6) (-8, 9) (10, -3)

LEVEL 3

Give the slope of a line perpendicular to the given line.

7) $y = 3x + 5$

8) $y = -\frac{2}{3}x - 4$

9) $y = x - 2$

10) Write an equation of a line through (0, 2) that is perpendicular to $y = -4x + 6$.

LEVEL 4

11) By the end of your 5th French lesson, you have learned 20 vocabulary words. Write an equation that gives the number of vocabulary words you know, y , in terms of the number of lessons you have had, x . Assume that you learn the same number of words at each lesson.

12) In 1945, when the United Nations was formed, there were 51 member nations. In 1987, there were 159 member nations. Write an equation that gives the number of nations in the UN, y , in terms of the year, t . Let $t = 0$ correspond to 1945 and assume that membership followed a linear pattern.