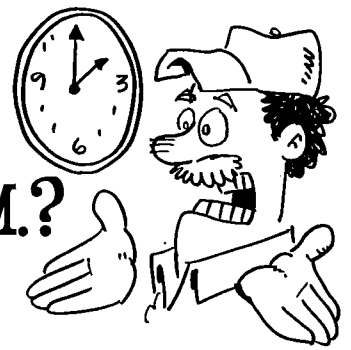# What Did the Electrician Say To His Daughter When She Came Home at 2 A.M.?

Write each equation in slope-intercept form, then find your answer in the rectangle below. Write the letter of the answer in the box containing the exercise number.

1. $-6x + 3y = -9$

2. $5x - y = 1$

3. $2y - 3x = 10$

4. $2y + x = 14$

5. $x - 4y - 8 = 0$

6. $3y + 18 = -8x + 3$

7. $9x - 2y = 7$

8. $x + 5y = 8x - 20$

9. $-2(3y - 1) - x = 0$

Answers 1-9

(F) $y = \frac{3}{2}x - 4$ (Y) $y = -\frac{1}{2}x + 7$ (I) $y = \frac{9}{2}x - \frac{7}{2}$ (U) $y = 2x - 3$

(U) $y = -\frac{8}{3}x - 5$ (I) $y = 5x - 1$ (B) $y = -\frac{8}{3}x + 7$ (N) $y = -\frac{1}{6}x + \frac{1}{3}$

(E) $y = \frac{7}{5}x - 4$ (K) $y = \frac{1}{4}x + 5$ (A) $y = \frac{3}{2}x + 5$ (E) $y = \frac{1}{4}x - 2$

Write each equation in slope-intercept form, then use the slope and y-intercept to graph it. The graph will cross a letter outside the grid. Write this letter in the box containing the exercise number.
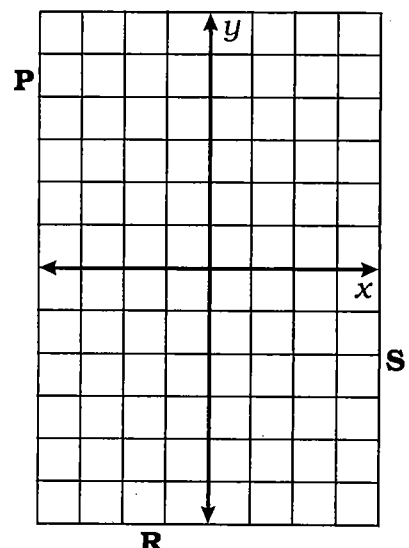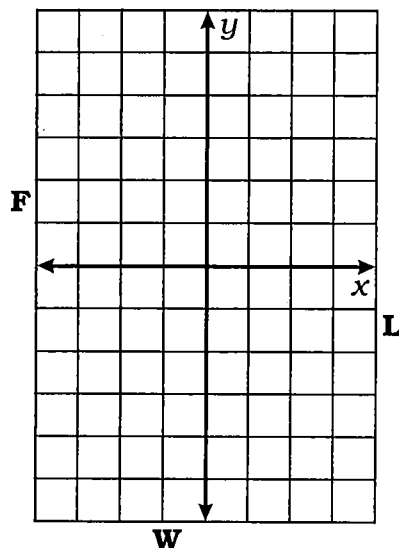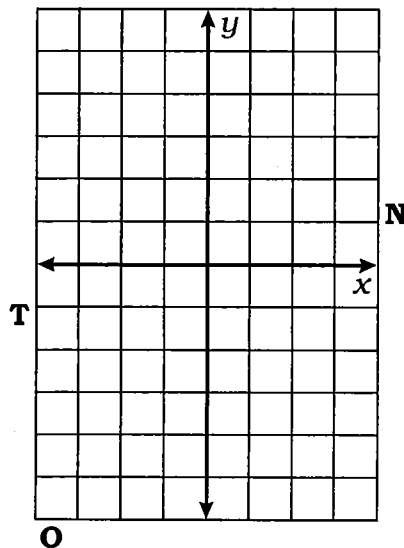
10. $2x - y = -1$

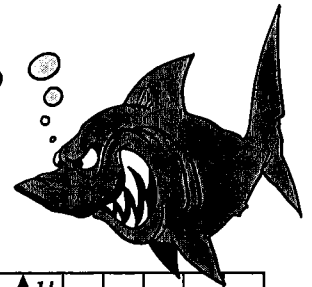12. $4y + 20 = 5x$

14. $7x - 1 = 3y + 8$

11. $3y + 2x + 12 = 0$

13. $3(x - 1) = 2x - y$

15. $9x + 18y = 0$

12	2	14	5	4	10	1	7	9	15	6	13	3	11	8

Linear Equations and Their Graphs:
Writing an Equation in Slope-Intercept Form, Then Drawing the Graph

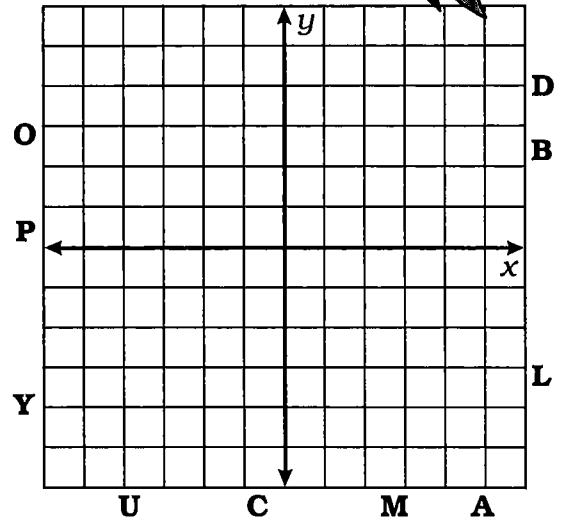**7.13**

What Do Man-Eating Fish Use For Barbeques?

Graph each equation on the grid to its right. The graph will cross a letter outside the grid. Find this letter in the string of letters and cross it out each time it appears. When you finish, write the remaining letters in the space below.

1. $-2x + 5y = 15$
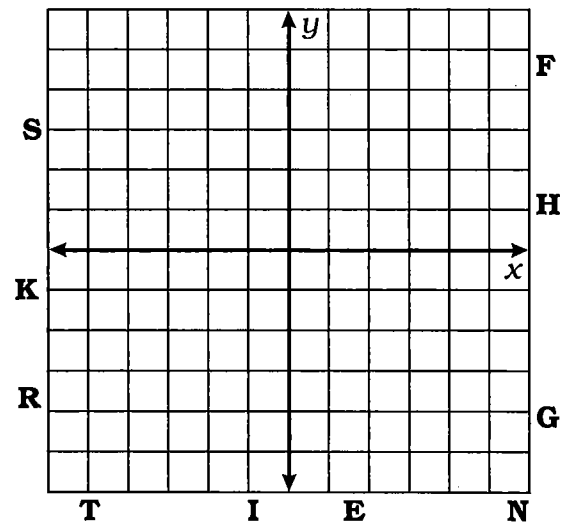
2. $2x + y + 1 = 0$

3. $-x - 6y = 30$

4. $9x = 9y + 36$

5. $5x - 3y = 0$

6. $y - 4 = 0$

(grid 1 with letters: D, B, L on right; O, P, Y on left; U, C, M, A on bottom; y and x axes)

7. $4x + 5y = 5$

8. $3x - 8 = y - 4$

9. $20y - 60 = 5x$

10. $-2(x + y) = 2 + 5x$

11. $x + y = 5 - x$

12. $x + y = y - 5$

(grid 2 with letters: F, H, G on right; S, K, R on left; T, I, E, N on bottom; y and x axes)

B F N I S T H E M B A T P D R N U K C Y G O I T E A P L D

answer to title question:

EXTRA: Planning for a Backpacking Trip

Trex is mixing raisins and peanuts to make trail mix. Raisins have 60 calories/oz and peanuts have 150 calories/oz. Trex wants to have a total of 1200 calories.

Let x = number of ounces of raisins
Let y = number of ounces of peanuts

Write an equation stating that the total number of calories is 1200. Then graph the equation.

? What are some different combinations of raisins and peanuts that Trex could use?

(graph: Peanuts (oz) on vertical axis 2–10, Raisins (oz) on horizontal axis 0–20)