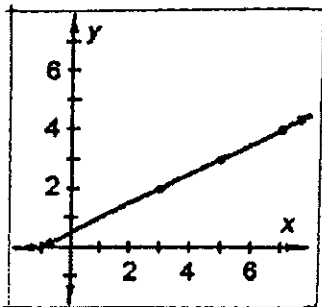


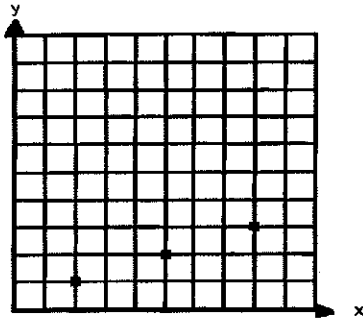
ANSWER KEY

- 1) The first differences are 4, 8, 12, and 16; The second difference is 4; The next two terms are 72 and 96.
- 2) The next three terms are: 22, 29, and 37.
- 3) The first differences are: 3, 5, 7, and 9. The next three terms are: 57, 70, and 84.
- 4) first difference: 5, 10, 15, 20
second difference: 5, 5, 5
- 5) 960, 1920, 3840. Each term is the previous term multiplied by 2.
- 6) 156
- 7) The variable would represent the amount of money Kevin has.
- 8) $0.80n$
- 9) $15x = 125$
- 10) $10m + 50$
- 11) -4
- 12) $38 + x = 62$; 24°F
- 13) $5x + 2 = 80$; 16 stacks
- 14) $x + x + 5 = 17$; \$11
- 15) $x + 3x = 180$; \$45
- 16) 7
- 17) If you do the addition first, you get 30. If you do the multiplication first, you get 14. Fourteen is the correct answer because you must do multiplication before addition according to order of operations.
- 18) 10
- 19) 11
- 20) The x - and y -coordinates are positive in Quadrant I.
- 21) yes

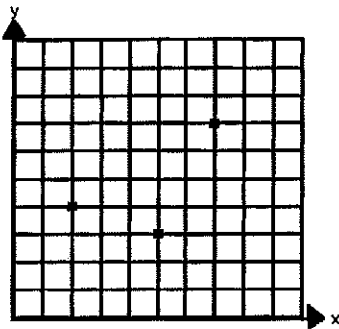


- 22) $A(2, 0)$, $B(5, 2)$

23) The points lie on a straight line.



24) The points do not lie on a straight line.



25) $b = 3a$

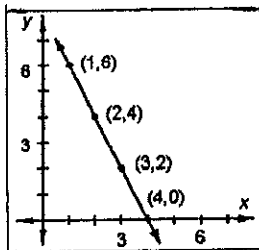
26) $y = 2x - 3$

27) $n = -m$

28) $y = -5x + 3$

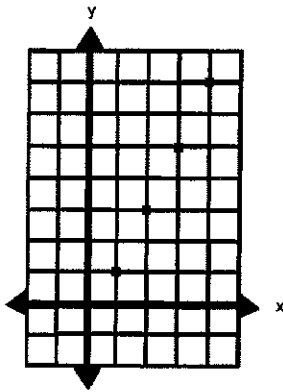
29)

x	1	2	3	4	5
y	6	4	2	0	-2

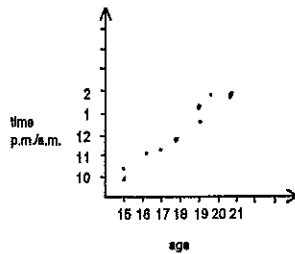


30)

x	1	2	3	4
y	1	3	5	7



31) A positive correlation



- 32) The scatter plot shows a strong positive correlation. Large values of x are associated with large values of y , and small values of x are associated with small values of y .
- 33) The scatter plot shows a strong negative correlation. Large values of x are associated with small values of y , and small values of x are associated with large values of y .
- 34) The scatter plot shows a strong negative correlation. Large values of x are associated with small values of y ; and small values of x are associated with large values of y .
- 35) If the points are grouped along the line, there is a strong correlation.
- 36) b.
- 37) d.
- 38) c.
- 39) d.
- 40) a.
- 41) d.
- 42) c.
- 43) a.
- 44) b.
- 45) a.
- 46) d.
- 47) b.
- 48) c.
- 49) c.