Worksheet 4.4 – The Slope of a Line – Textbook pages 226-233

<u>LEVEL 1</u>

Find the slope of the line passing through the given points. Use the slope formula and show your work.

1) (3,2) (2,3)   2) (4,6) (-2,6)   3) (3,-9) (3,8)

4) (-1,4) (3,-2)   5) (7,2) (-8,-3)   6) (-5,-4) (-3,-9)

<u>LEVEL 2</u>

Find the value of *y* so that the line passing through the two points has the given slope.
Show your work.

7) (3,*y*) (3,3) m = undefined   8) (4,*y*) (6,3) m = -2   9) (-3,5) (0,*y*) m = 3

10) (3,5) (1,*y*) m = 3/2   11) (-6,*y*) (0,2) m = -1/3   12) (5,-1) (-2,*y*) m = 1

<u>LEVEL 3</u>

Find the rate of change between the two points and include units. Show your work.

13) (4,10) (6,15); *x* in minutes, *y* in miles   14) (3,5) (11,69); *x* in years, *y* in dollars

15) (7,21) (14,42); *x* in days, *y* in gallons   16) (1,2) (8,16); *x* in weeks, *y* in pounds

LEVEL 4

17) In 1989 a postage stamp cost $0.25. In 1999 a postage stamp cost $0.33. Find the average rate of change in postage in cents per year.

18) In 1975 a four function calculator cost $125. In 1995 a 4 function calculator cost $5. Find the rate of change in cost of a calculator in dollars per year.

19) In 1992, 104 million voters participated in the federal election. In 1996, 96 million voters participated in the federal election. Find the rate of change of voters per year.