

Section 2.2B: Slope of a line

#35 – 46:

- a) Find the slope of the given line
- b) Find the slope of all lines parallel to the given line
- c) Find the slope of all lines perpendicular to the given line.

35)  $y = \frac{-3}{5}x + 2$

36)  $y = \frac{-2}{7}x + 6$

37)  $y = 3x - 2$

38)  $y = 2x - 3$

39)  $y = \frac{2}{9}x - 4$

40)  $y = \frac{7}{5}x - 1$

41)  $y = -6x + 5$

42)  $y = -4x + 8$

43)  $x = 2$

44)  $x = -5$

45)  $y = 4$

46)  $y = 1$

# 47 – 52:

Given below are descriptions of two lines.

Find the slope of Line 1:

Find the slope of Line 2:

Are the lines parallel, perpendicular or neither?

47) Line 1: Goes through  $(6, -3)$  and  $(5, 9)$

Line 2: Goes through  $(17, 18)$  and  $(5, 17)$

48) Line 1: Goes through  $(1, -2)$  and  $(7, 9)$

Line 2: Goes through  $(6, 8)$  and  $(17, 2)$

49) Line 1: Goes through  $(8, 2)$  and  $(-6, 3)$

Line 2: Goes through  $(-5, 9)$  and  $(9, 8)$

50) Line 1: Goes through  $(4, -2)$  and  $(3, -8)$

Line 2: Goes through  $(6, 6)$  and  $(9, 24)$

51) Line 1: Goes through  $(2, -2)$  and  $(3, 1)$

Line 2: Goes through  $(10, 5)$  and  $(9, 8)$

52) Line 1: Goes through  $(7, -14)$  and  $(-2, 5)$

Line 2: Goes through  $(0, 5)$  and  $(9, 24)$