

## Assignment

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation.**

1)  $x - 13 = -18$

2)  $-12 = \frac{x}{4}$

3)  $-119 = 7n$

4)  $-4b = -44$

5)  $16v = -32$

6)  $8(1 + 2x) = 40 + 8x$

7)  $6(2b + 5) = 15 + 7b$

8)  $-13 - n = -7(1 + n)$

9)  $-27 - 6a = -3a - 6(a + 1)$

10)  $-7 + 7(6r + 7) = 4 + 4r$

11)  $-\frac{20}{3} = 2n + 2n$

**Simplify. Your answer should contain only positive exponents.**

12)  $-2x^0 \cdot -2x^3$

13)  $-4n^2 \cdot -3n^4$

14)  $p^3 \cdot -2p$

15)  $-3mm^4 \cdot m$

16)  $2x^{-1} \cdot -3x^{-2}$

17)  $-3x^2 \cdot 3x$

$$18) -3b^3 \cdot 3b^3$$

$$19) n^2 \cdot -3n^2$$

$$20) -2x^3 \cdot 2xy^{-1}$$

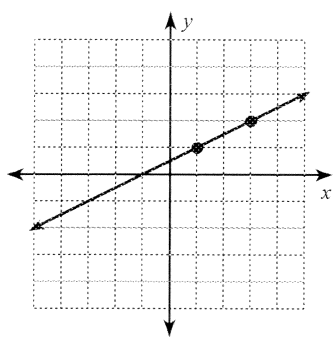
$$21) -2y^{-3} \cdot xy^{-2}$$

$$22) -2vu^{-3} \cdot u^{-2}v^3$$

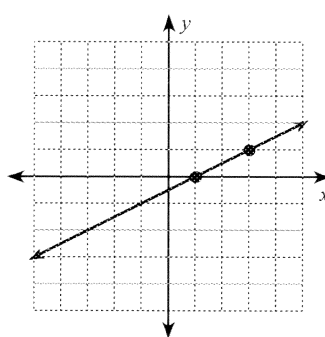
$$23) -2u^{-2}v^0 \cdot u^{-1}v^2$$

**Find the slope of each line.**

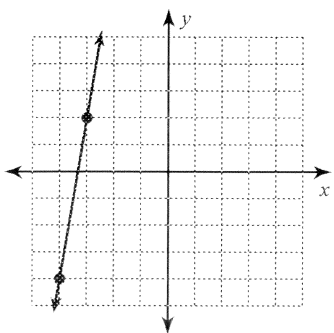
24)



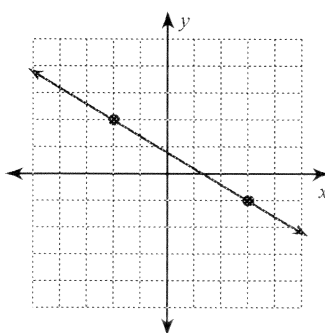
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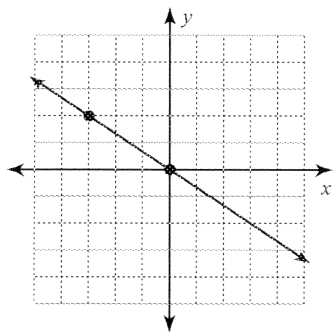
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27)

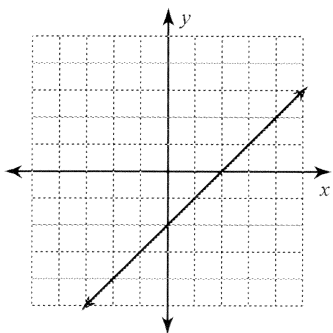


28)



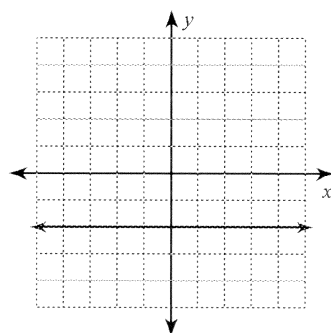
29)  $y = x - 2$

30)  $y = \frac{3}{5}x$

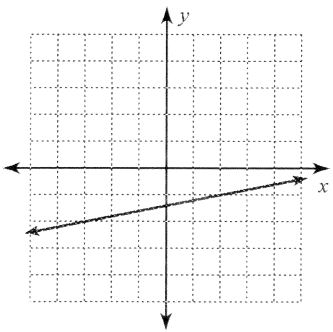


31)  $y = \frac{4}{3}x - 1$

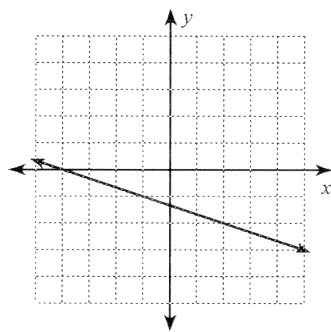
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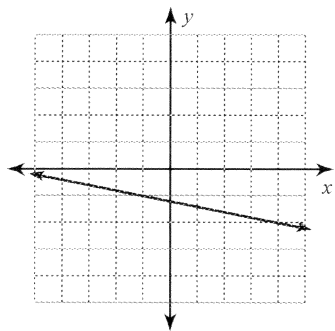
34)



35)

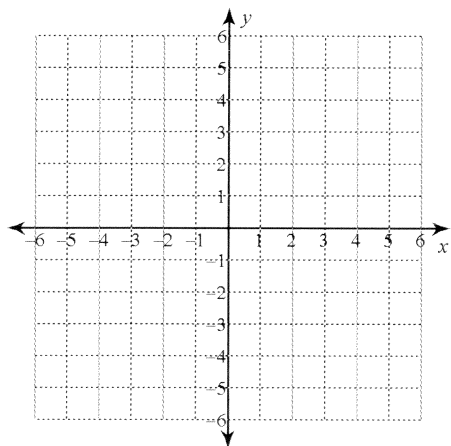


36)

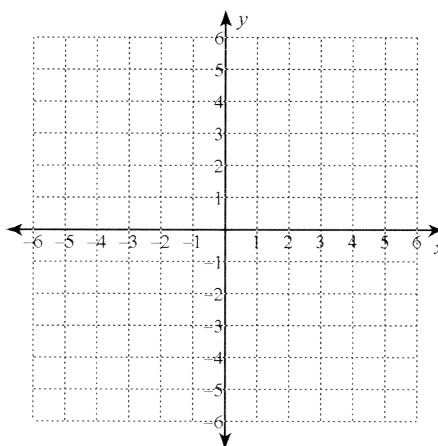


Sketch the graph of each line. (make a table for each, pick 3 'x' values)

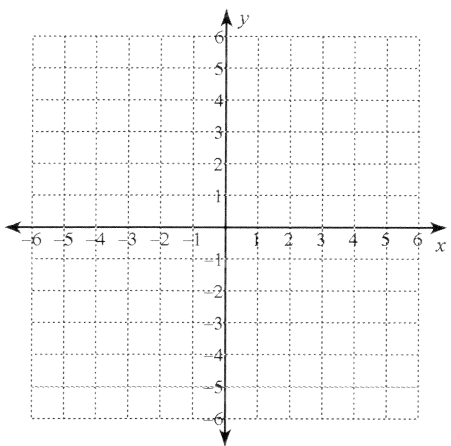
37)  $y = \frac{7}{4}x + 2$



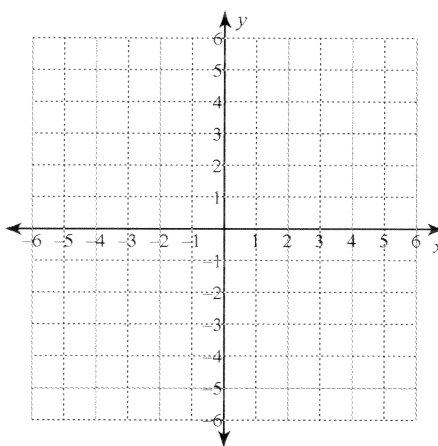
38)  $y = -\frac{8}{3}x - 3$



39)  $y = -\frac{2}{5}x + 1$

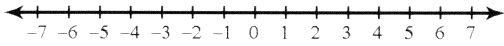


40)  $y = \frac{7}{4}x - 2$

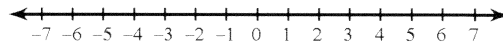


Draw a graph for each inequality.

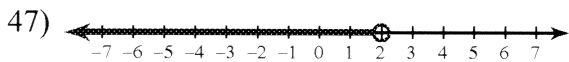
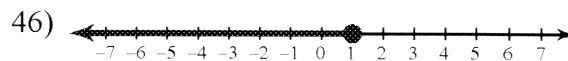
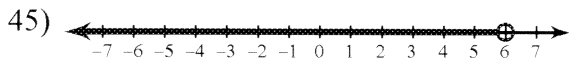
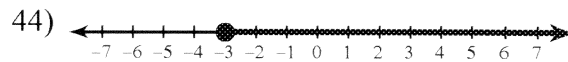
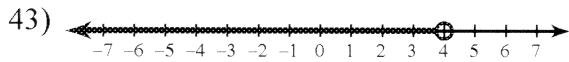
41)  $-4 \geq b$



42)  $-x > 2$

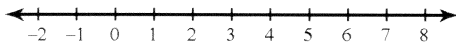


Write an inequality for each graph.

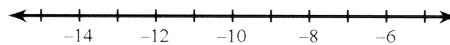


Solve each inequality and graph its solution.

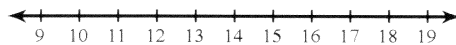
48)  $-18x > -36$



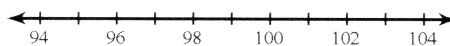
49)  $m - 15 \leq -28$



50)  $45 \geq 3p$



51)  $9 \leq \frac{n}{11}$



52)  $n - 5 > -15$



**Write each as an algebraic expression.**

53) the difference of a number and 7 is greater than or equal to 30

54)  $c$  to the 8th is 27

55) the sum of  $v$  and 10 is 30

56) half of a number is greater than or equal to 46

57) the  $u$  power of 13 is greater than or equal to 17

**Evaluate each expression.**

58) 6 squared

59) the product of 10 and 6

60) 8 increased by 6

61) 19 minus 4

62) 23 decreased by 20

**Write each as a verbal expression.**

63)  $n + 7 = 5$

64)  $w^3 = 35$

65)  $q - 4 \leq 48$

66)  $t^2 \leq 46$

67)  $n \cdot 10 = 38$

**Evaluate each expression.**

68)  $4(4 - 3)(4 + 6 - 3)$

69)  $(6 - 4) \times \frac{6 \times 2}{6}$

70)  $\frac{12 \times 2 + 13 - 1}{4 + 2}$

71)  $3 \times \frac{3}{3 \times 1^2} \times 5$

72)  $\frac{14 - 5}{3}(3 + 2) - 4$

**Evaluate each using the values given.**

73)  $p - \left(\frac{4}{4} + m\right) - n$ ; use  $m = -8$ ,  $n = -10$ , and  $p = -10$

74)  $\frac{q}{2} + p + p - 6$ ; use  $p = 2$ , and  $q = -2$

75)  $z(x - x) + z + x$ ; use  $x = 5$ , and  $z = -2$

76)  $\frac{y}{2} + \frac{4x}{4}$ ; use  $x = -4$ , and  $y = -2$

77)  $y + z + y - z - y$ ; use  $y = 7$ , and  $z = 1$