

## SUMMER MATH

Completion of this packet will result in +10 on first test of semester. ALL work must be shown and provided for full points.

Write each as a fraction.

1) 0.85

2) 0.58

3) 0.003

4) 0.2

5)  $0.\overline{6}$

6) 0.9

7) 0.012

8) 0.125

9) 0.25

10) 0.5

Write each as a percent. Round to the nearest tenth of a percent.

11) 0.009

12) 0.001

3) 0.42

14) 0.454

15) 0.6

16) 0.11

17) 0.006

18) 0.003

19) 0.3

20) 0.915

Write each as a percent. Use repeating decimals when necessary.

21)  $5\frac{1}{2}$

22)  $\frac{91}{100}$

23)  $\frac{7}{8}$

24)  $\frac{1}{125}$

25)  $4\frac{3}{4}$

26)  $\frac{3}{5}$

27)  $6\frac{1}{2}$

28)  $\frac{2}{5}$

29)  $\frac{3}{4}$

30)  $\frac{1}{8}$

Write each as a decimal. Use repeating decimals when necessary.

31)  $5\frac{18}{25}$

32)  $2\frac{1}{2}$

33)  $3\frac{7}{10}$

34)  $\frac{1}{2}$

35)  $\frac{8}{9}$

36)  $\frac{7}{8}$

37)  $\frac{1}{10}$

38)  $\frac{3}{5}$

39)  $9\frac{7}{8}$

40)  $\frac{2}{5}$

Simplify. Your answer should contain only positive exponents.

41)  $\frac{p^2}{6p^3}$

42)  $\frac{4n^3}{4n^3}$

43)  $\frac{8r}{5r}$

44)  $\frac{7k}{2k}$

45)  $\frac{3a^4}{a}$

46)  $\frac{8v^4}{2v}$

Simplify each expression.

47)  $9v + 10v$

48)  $m + 10 + 2m - 3$

49)  $x + 6 - 2$

50)  $5x + 2 + 8$

51)  $-n + 7n$

52)  $-4x + 10x$

53)  $m + 9 + 1 - 8m$

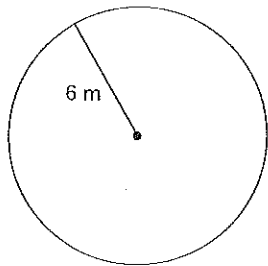
54)  $7m + 8m$

55)  $r + 10 + 3r - 5$

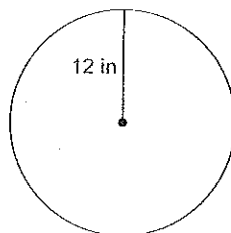
56)  $n + 9 + 2n - 8$

Find the area of each. Round your answer to the nearest tenth.

57)

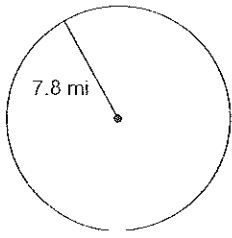


58)

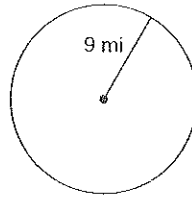


Find the circumference of each circle. Round your answer to the nearest tenth.

59)

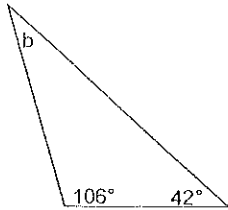


60)



Find the measure of angle b.

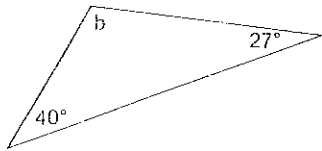
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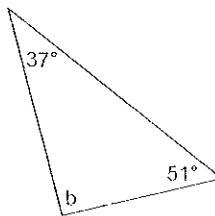
62)



63)



64)



Solve each equation.

65)  $-3 = 13 + a$

66)  $-20k = 120$

67)  $18 = 6 + k$

68)  $11 = m - 6$

69)  $16k = -128$

70)  $17x = 153$

$$71) \frac{k}{2} + 3 = 6$$

$$72) \frac{n}{6} - 1 = 1$$

$$73) -n - 9 = -4$$

$$74) -5 + 9n = 85$$

$$75) -158 = -8 - 10b$$

$$76) -5 = \frac{n}{4} - 3$$

$$77) -1 = \frac{v-2}{10}$$

$$78) 10 - 9x = 28$$

$$79) -50 = 4p - 10$$

$$80) 8n + 3 = 139$$

$$81) 10a - 10 = -30$$

$$82) 6 = \frac{x}{5} + 9$$

**Simplify each expression.**

$$83) 6 + 7(-8 + 10k)$$

$$84) 6(n - 9) + 10$$

$$85) 4(1 + 10n) + 9n$$

$$86) -2(x - 5) - 2x$$

$$87) -4(9 + 2m) + 4m$$

$$88) 4(x - 8) + 6$$

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

$$89) 2r^3 \cdot r^4$$

$$90) 2r^3 \cdot r^3$$

$$91) 2n^4 \cdot n^3$$

$$92) 3v^4 \cdot 4v$$

93)  $8r^4 \cdot r^4$

94)  $3v^3 \cdot v^3$

Evaluate each expression.

95)  $-6 \div ((3)(-1))$

96)  $6 + (2)(4)$

97)  $5^2 - 5$

98)  $6 - (-4)(-4)$

99)  $-3 - 2 - -4$

100)  $-6 - 5 + 6$

101)  $2 - 6 - 5$

102)  $(2^2)(-4)$

103)  $5^2 - 3$

104)  $-2 - -6 - 2$

105)  $-4 - (3)(-2)$

106)  $(2 \div -2)^2$

Find the mode, median, mean, and range for each data set. (You may use your calculator)

107) # Words in Book Titles

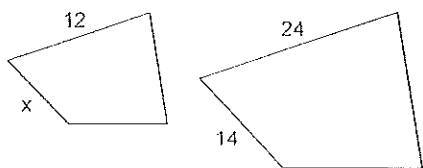
3	1	5	1	2	3	5	5
6	2	2	1	2	3	6	2
4							

108) Minutes to Run 5km

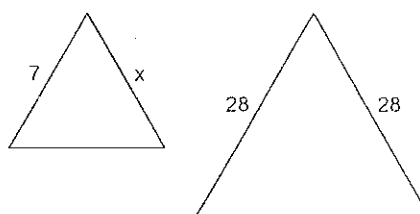
31.1	47.7	39.4	36	25.4
35.6	32.2	25.2	35.1	35.1
22.5	40.1	32.1	33.4	31.6
26.6	31.3			

Each pair of figures is similar. Find the missing side.

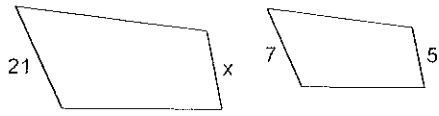
109)



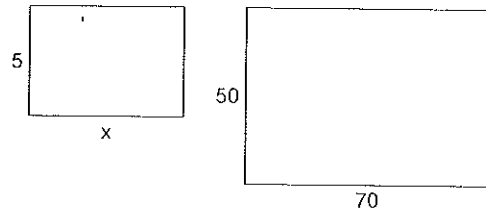
110)



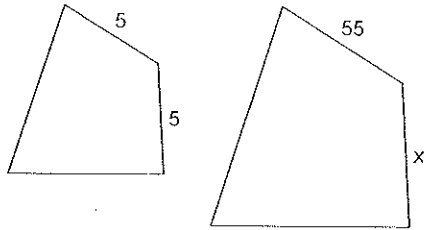
111)



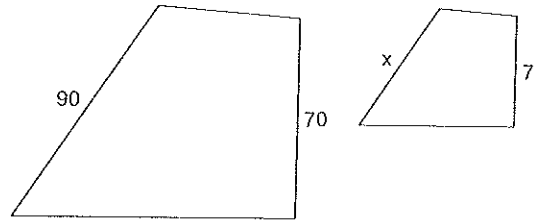
112)



113)

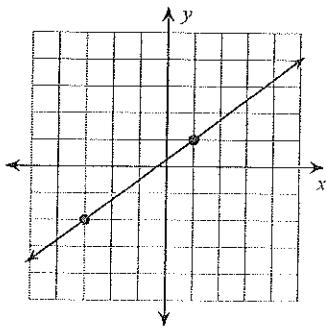


114)

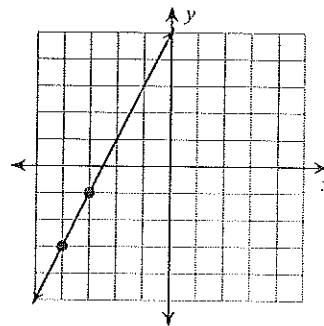


Find the slope of each line.

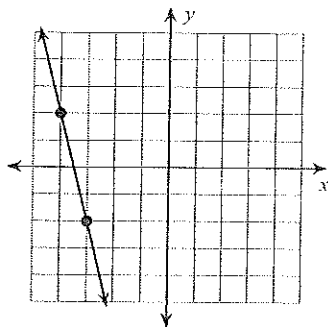
115)



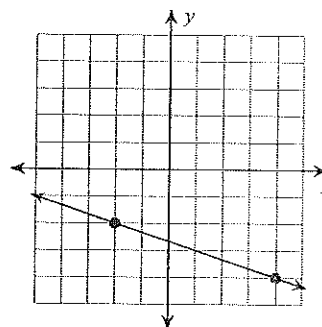
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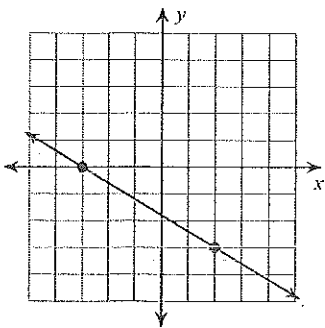
117)



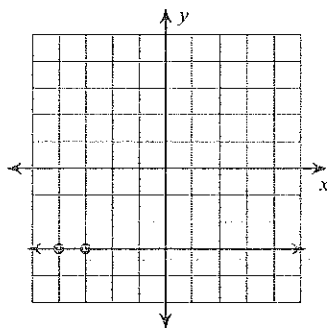
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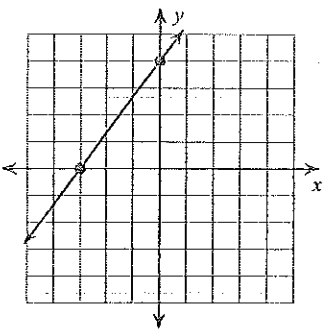
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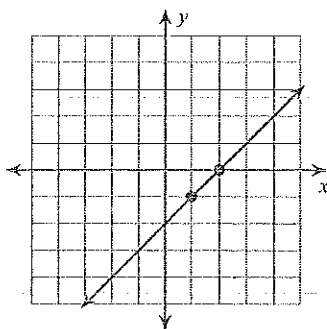
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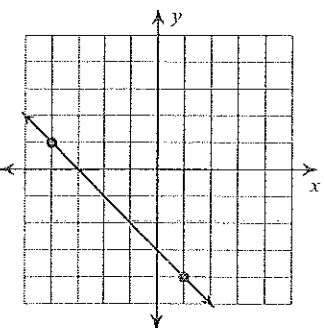
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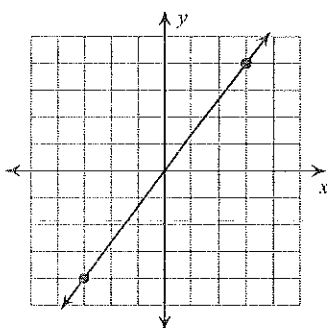
122)



123)



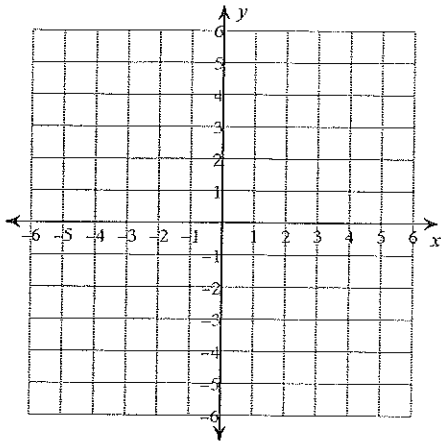
124)



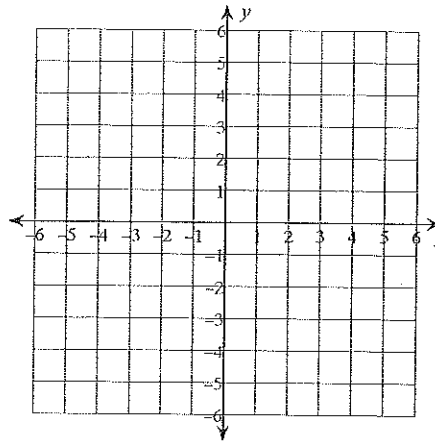


Sketch the graph of each line.

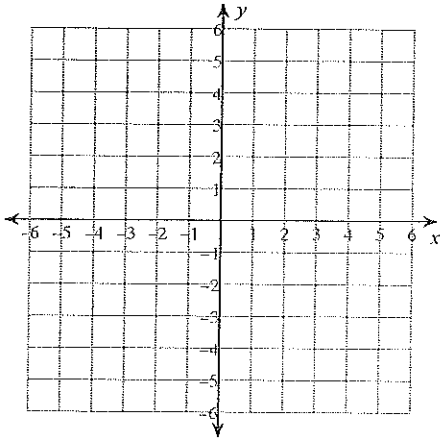
125)  $y = \frac{1}{2}x - 2$



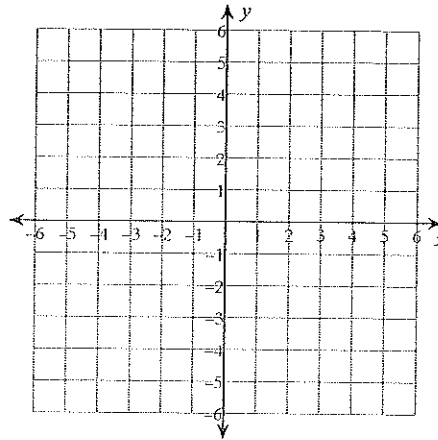
126)  $y = x - 3$



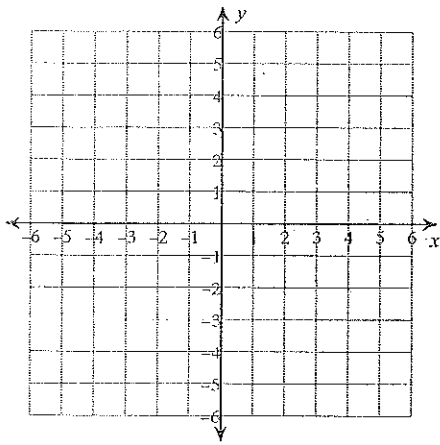
127)  $y = -2x$



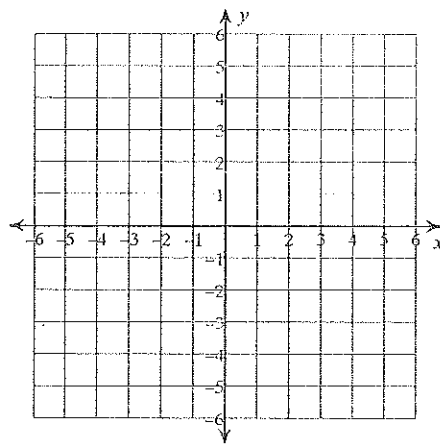
128)  $y = -5x + 3$



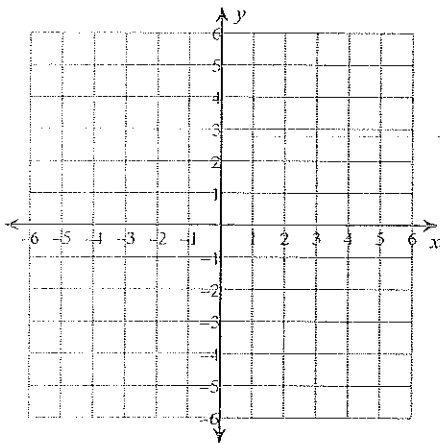
129)  $y = \frac{1}{2}x + 5$



130)  $y = -\frac{7}{5}x - 3$



131)  $y = -3x - 2$



132)  $y = 2$

