

**Pre-Course Test**

For use before Chapter 1

Give the place value of the underlined digit. Then round the number to that place.

1. 4561.23                      2. 875.43  
 3. 87.344                        4. 91.8756

Estimate the sum or difference by rounding each number to the place of its leading digit.

5.  $1376 + 7602$                       6.  $54,929 - 23,781$   
 7.  $94,528 - 45,095$                   8.  $580,349 + 290,111$

Find a low estimate and a high estimate for the product or quotient.

9.  $238 \times 87$                         10.  $875 \times 482$   
 11.  $6309 \div 53$                       12.  $4915 \div 86$

Order the numbers from least to greatest.

13. 4.3, 3.4, 4.5, 3.45              14. 0.71, 0.75, 0.7, 0.715

Perform the indicated operation.

15.  $4.2 + 1.9$                         16.  $18.24 + 22.09$   
 17.  $8.6 - 3.45$                       18.  $8.21 - 5.19$   
 19.  $9.3 \times 0.6$                       20.  $15.2 \times 7.1$   
 21.  $1.5 \div 0.3$                       22.  $18.25 \div 7.3$

Write the mixed number as an improper fraction.

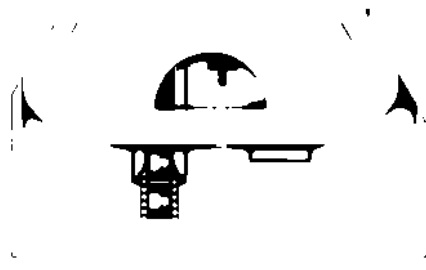
23.  $5\frac{3}{4}$                               24.  $6\frac{4}{13}$

Write the improper fraction as a mixed number.

25.  $\frac{23}{6}$                                 26.  $\frac{27}{11}$

**Answers**

1. \_\_\_\_\_  
 2. \_\_\_\_\_  
 3. \_\_\_\_\_  
 4. \_\_\_\_\_  
 5. \_\_\_\_\_  
 6. \_\_\_\_\_  
 7. \_\_\_\_\_  
 8. \_\_\_\_\_  
 9. \_\_\_\_\_  
 10. \_\_\_\_\_  
 11. \_\_\_\_\_  
 12. \_\_\_\_\_  
 13. \_\_\_\_\_  
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 21. \_\_\_\_\_  
 22. \_\_\_\_\_  
 23. \_\_\_\_\_  
 24. \_\_\_\_\_  
 25. \_\_\_\_\_  
 26. \_\_\_\_\_





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Find the sum or difference.

27.  $\frac{3}{7} + \frac{2}{7}$

28.  $\frac{6}{17} + \frac{9}{17}$

29.  $\frac{17}{21} - \frac{7}{21}$

30.  $\frac{16}{29} - \frac{5}{29}$

Find the product.

31.  $8 \times \frac{3}{4}$

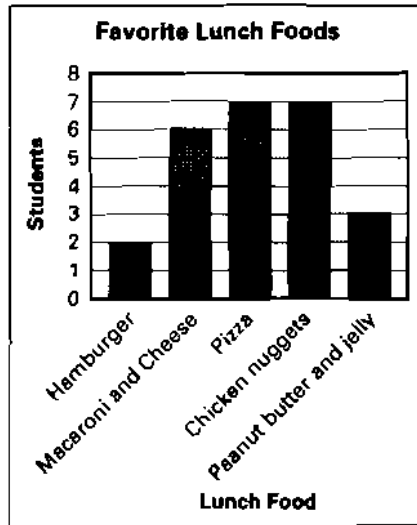
32.  $\frac{5}{6} \times 30$

33.  $4 \times \frac{7}{9}$

34.  $\frac{4}{7} \times 9$

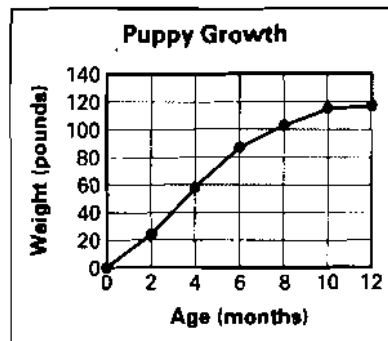
In Exercises 35–37, use the bar graph which shows the results of a survey of 25 students about their favorite lunch food.

- 35. How many students chose chicken nuggets?
- 36. Which two foods were chosen by the same number of people?
- 37. How many more students chose macaroni and cheese than chose hamburger?



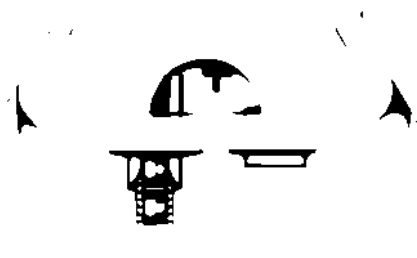
In Exercises 38–40, use the line graph which shows the weight of an Irish wolfhound puppy.

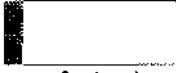
- 38. What was the weight of the puppy at 8 months?
- 39. How old was the puppy when it weighed 60 pounds?
- 40. Between which two ages was the weight increase the greatest? Between which two months was the weight gain the least?



Answers

- 27. \_\_\_\_\_
- 28. \_\_\_\_\_
- 29. \_\_\_\_\_
- 30. \_\_\_\_\_
- 31. \_\_\_\_\_
- 32. \_\_\_\_\_
- 33. \_\_\_\_\_
- 34. \_\_\_\_\_
- 35. \_\_\_\_\_
- 36. \_\_\_\_\_
- 37. \_\_\_\_\_
- 38. \_\_\_\_\_
- 39. \_\_\_\_\_
- 40. \_\_\_\_\_



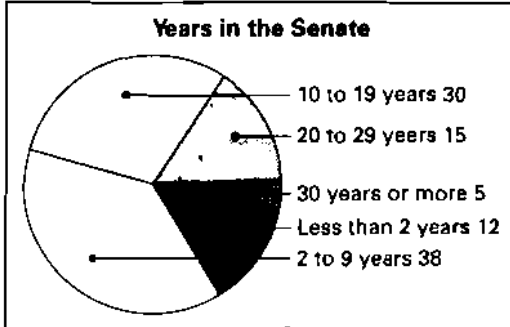


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# Pre-Course Test

For use before Chapter 1

In Exercise 41–43, use the circle graph which shows the number of years that a senator had worked in the U.S. Senate at the start of the 104th Congress.



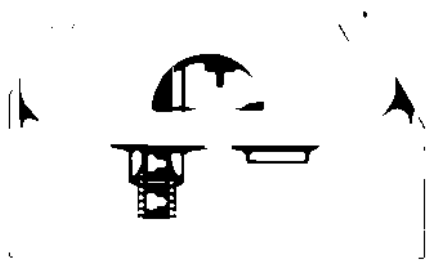
**Answers**

- 41. \_\_\_\_\_
- 42. \_\_\_\_\_
- 43. \_\_\_\_\_
- 44. See left.
- 45. \_\_\_\_\_

- 41. How many senators had worked in the U.S. Senate for 10 to 19 years?
- 42. How many senators had worked in the U.S. Senate for 20 years or more?
- 43. How many senators had worked in the U.S. Senate for 9 years or less?
- 44. Using the set of whole numbers less than 13, draw a Venn diagram showing set *A*, which consists of numbers that are multiples of 2, and set *B*, which consists of numbers that are multiples of 3.

- 45. Use the Venn diagram from Exercise 44 to determine whether the following statement is true or false.

*There are exactly two whole numbers less than 13 that are multiples of 2 and 3.*





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# Pre-Course Test

For use before Chapter 1

46. Draw and label a rectangle with a length of 5 centimeters and a width of 3 centimeters.

47. Find the perimeter of the rectangle in Exercise 46.

Copy and complete the statement.

48. 9 ft =   ?   yd

49. 560 mm =   ?   cm

Use a ruler to draw a segment with the given length.

50.  $\frac{5}{8}$  inch

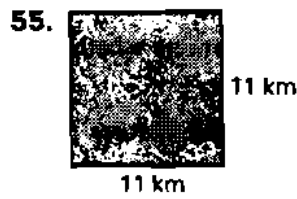
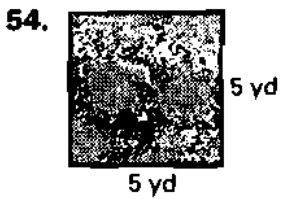
51. 5.3 centimeters

Use a ruler to find the length of the segment in inches and centimeters.

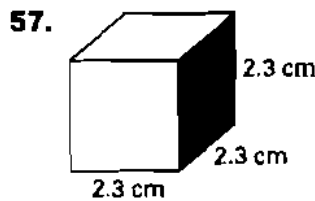
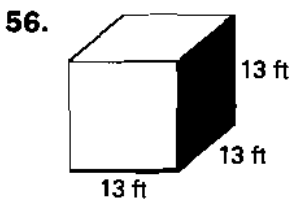
52. \_\_\_\_\_

53. \_\_\_\_\_

Find the area of the square.



Find the volume of the cube.



## Answers

46. See left.

47. \_\_\_\_\_

48. \_\_\_\_\_

49. \_\_\_\_\_

50. See left.

51. See left.

52. \_\_\_\_\_

53. \_\_\_\_\_

54. \_\_\_\_\_

55. \_\_\_\_\_

56. \_\_\_\_\_

57. \_\_\_\_\_





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# Pre-Course Test

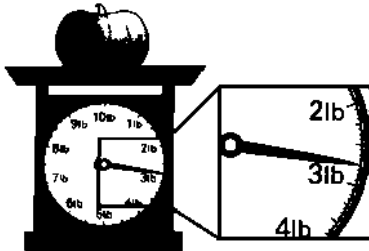
For use before Chapter 1

Copy and complete the statement using  $<$ ,  $>$ , or  $=$ .

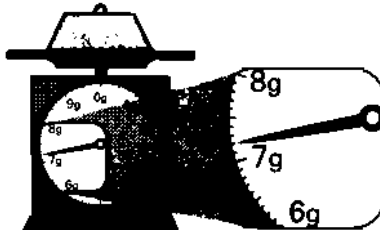
58. 1.5 tons  $\underline{\quad ? \quad}$  3100 lb      59. 6.7 kg  $\underline{\quad ? \quad}$  6700 g

Find the weight or mass of the object.

60.



61.



**Answers**

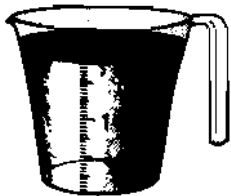
58. \_\_\_\_\_  
 59. \_\_\_\_\_  
 60. \_\_\_\_\_  
 61. \_\_\_\_\_  
 62. \_\_\_\_\_  
 63. \_\_\_\_\_  
 64. \_\_\_\_\_  
 65. \_\_\_\_\_  
 66. \_\_\_\_\_  
 67. \_\_\_\_\_  
 68. See left.  
 69. See left.

Copy and complete the statement using  $<$ ,  $>$ , or  $=$ .

62. 16 fl oz  $\underline{\quad ? \quad}$  2 c      63. 31,150 mL  $\underline{\quad ? \quad}$  3 L

Find the amount of liquid in the measuring cup.

64.

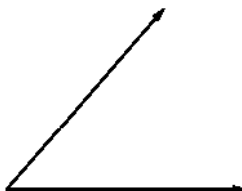


65.

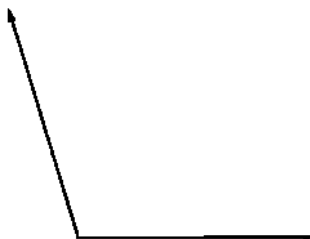


Use a protractor to measure the angle.

66.



67.



Use a protractor to draw an angle that has the given measure.

68.  $168^\circ$       69.  $22^\circ$



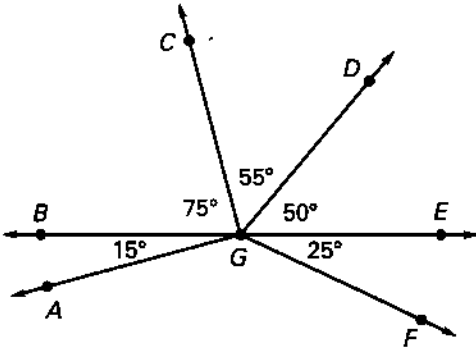


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# Pre-Course Test

For use before Chapter 1

Find the measure of the angle. Then classify the angle as *acute*, *right*, *obtuse*, or *straight*.



- 70.  $m\angle AGC$
- 71.  $m\angle CGF$
- 72.  $m\angle DGF$
- 73.  $m\angle BGE$

Use a compass to draw a circle with the given radius.

- 74. 0.5 inch
- 75. 2 cm

**Answers**

- 70. \_\_\_\_\_
- 71. \_\_\_\_\_
- 72. \_\_\_\_\_
- 73. \_\_\_\_\_
- 74. See left.
- 75. See left.
- 76. See left.

76. Use a straightedge and a compass to draw a segment whose length is the sum of the lengths of the two given segments.

