Name_____ **Pre-Algebra 6 Summer Packet**

Please show work on a separate sheet of paper.

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 × 87

10. 875 × 482

11. 6309 ÷ 53

12. 4915 ÷ 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 × 0.6

20. 15.2 × 7.1

21. 1.5 ÷ 0.3

22. 18.25 ÷ 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. _____

_____

14. _____

_____

15. _____

16. _____

17. _____

18. _____

19. _____

20. _____

21. _____

22. _____

23. _____

24. _____

25. _____

26. _____

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

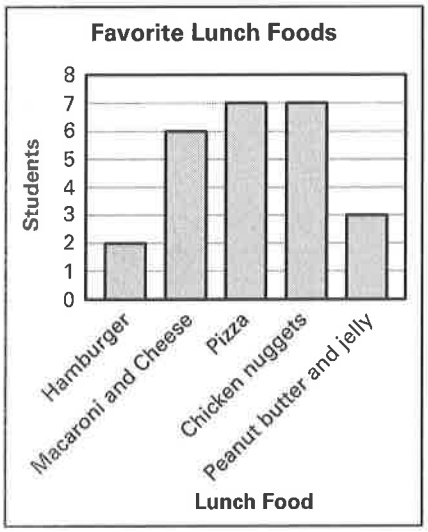
34. $\frac{4}{7} \times 9$

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?

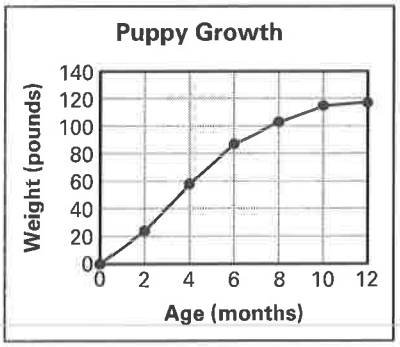


In Exercises 38–40, use the line graph which shows the weight of an Irish wolfhound puppy.

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. _____

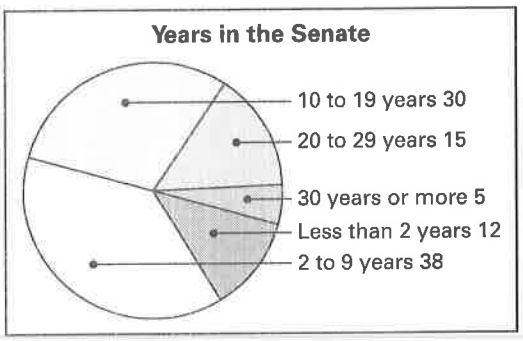
38. _____

39. _____

40. _____

_____

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.



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.

Answers

41. _____

42. _____

43. _____

44. See left.

45. _____

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

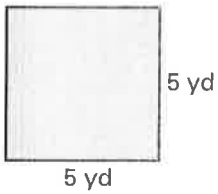
Use a ruler to find the length of the segment in inches and centimeters.

52. _____

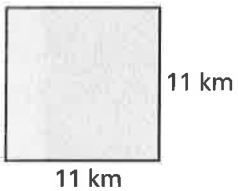
53. _____

Find the area of the square.

54.

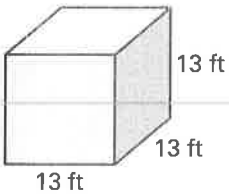


55.

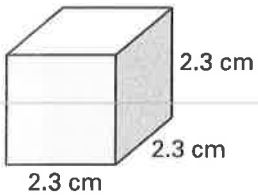


Find the volume of the cube.

56.



57.



Answers

46. See left.

47. _____

48. _____

49. _____

50. See left.

51. See left.

52. _____

_____

53. _____

_____

54. _____

55. _____

56. _____

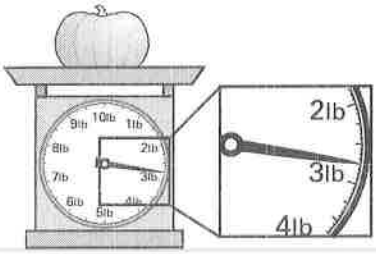
57. _____

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

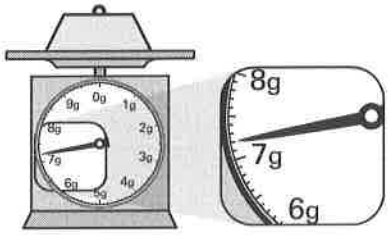
58. 1.5 tons __?__ 3100 lb **59.** 6.7 kg __?__ 6700 g

Find the weight or mass of the object.

60.



61.

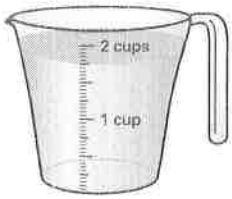


Copy and complete the statement using <, >, or =.

62. 16 fl oz __?__ 2 c **63.** 31,150 mL __?__ 3 L

Find the amount of liquid in the measuring cup.

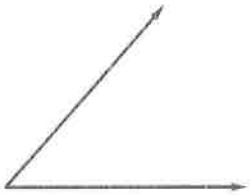
64.



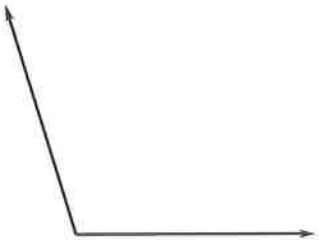
65.

Use a protractor to measure the angle.

66.



67.



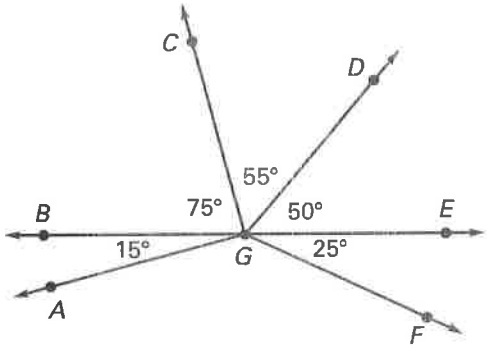
Use a protractor to draw an angle that has the given measure.

68. 168° **69.** 22°

Answers

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

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

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

P Q

R S

Answers

70. _____

71. _____

72. _____

73. _____

74. See left.

75. See left.

76. See left.