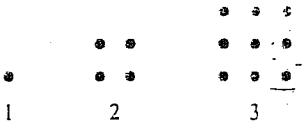


SEBHS 5th and 6th Grade Individual Test 2003

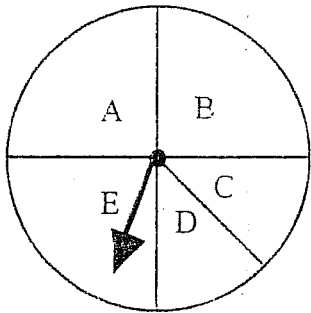
1. How many dots will be in the seventh figure? [A] 36 [B] 14 [C] 49 [D] 64



2. Choose the correct answer. If you double the length of each side of a square, the is doubled.

[A] volume [B] area [C] perimeter [D] not given

3. You spin the spinner below 50 times. Estimate the number of times the spinner will land on the section labeled E.



[A] 25 times [B] 13 times [C] 4 times [D] 35 times

Solve the equation.

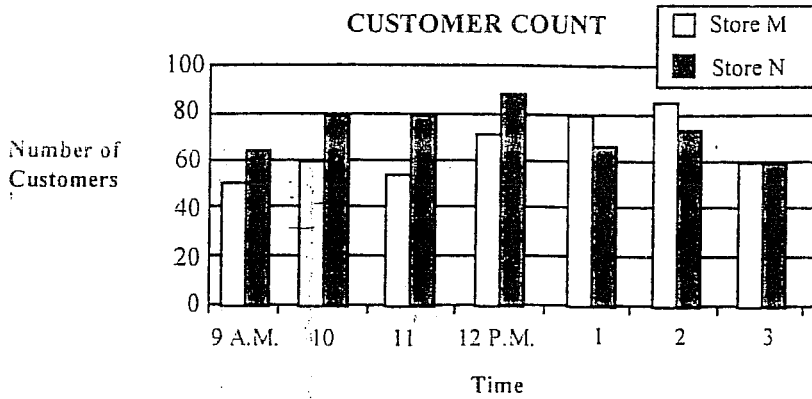
4. $e + 19 = 31$ [A] $e = 40$ [B] $e = -40$ [C] $e = 12$ [D] $e = 2$

5. $\frac{t}{6} = 36$ [A] $t = 36$ [B] $t = 216$ [C] $t = 96$ [D] $t = 6$

6. Your bill at the grocery store is \$23.88. You give the cashier \$24. How many ways can you be given change?

[A] 3 ways [B] 4 ways [C] 5 ways [D] 6 ways

7. The graph shows the number of customers in 2 local stores during a 6-hour period.



At what time was the difference between the number of customers at Store M and Store N the greatest?

- [A] 9 A.M. [B] 10 A.M. [C] 11 A.M. [D] 1 P.M.
8. Evaluate the expression when $w = 4$. $50 - (w + 4) \div 2$
- [A] 21 [B] 46 [C] 42 [D] 18
9. Simplify. $9 - 3 \cdot 3 + 5 - 2$ [A] 4 [B] 3 [C] 12 [D] 6
10. By what factors is the number divisible? 5211
- [A] 3, 6, and 9 [B] 3 and 9 [C] 3 only [D] 3 and 6
11. The sum of two prime numbers is greater than 35 and less than 40. What are the prime numbers?
- [A] 9 and 29 [B] 17 and 19 [C] 17 and 23 [D] 16 and 19
12. Write $\frac{36}{60}$ in simplest form. [A] $\frac{3}{5}$ [B] $\frac{9}{15}$ [C] $\frac{3}{4}$ [D] $\frac{1}{6}$
13. A will divided a person's estate into 15 equal shares. Bill received $\frac{4}{5}$ of the estate. How many fifteenths did Bill receive?
- [A] $\frac{11}{15}$ [B] $\frac{1}{15}$ [C] $\frac{12}{15}$ [D] $\frac{4}{15}$

14. Tess and five friends want to divide 3 pounds of clams evenly. How much should each person get?

[A] $\frac{1}{2}$ lb

[B] 2 lb

[C] $\frac{3}{5}$ lb

[D] $\frac{5}{3}$ lb

15. Write $\frac{27}{1000}$ as a decimal. [A] 0.027 [B] 0.0027 [C] 2.7 [D] 0.2700

16. Write $\frac{25}{8}$ as a mixed number. [A] $1\frac{8}{17}$ [B] $\frac{1}{8}$ [C] $25\frac{1}{8}$ [D] $3\frac{1}{8}$

17. Add. $\frac{5}{6} + \frac{1}{8}$ [A] $\frac{1}{6}$ [B] $\frac{3}{7}$ [C] $\frac{24}{23}$ [D] $\frac{23}{24}$

18. Subtract. $\frac{2}{3} - \frac{1}{10}$ [A] $\frac{1}{30}$ [B] $\frac{17}{30}$ [C] $\frac{23}{30}$ [D] $\frac{1}{15}$

19. Multiply. $\frac{2}{5} \times \frac{1}{5} \times \frac{15}{100}$ [A] $\frac{3}{50}$ [B] $\frac{3}{10}$ [C] $\frac{30}{500}$ [D] $\frac{3}{250}$

20. Divide. $\frac{2}{7} \div \frac{8}{9}$ [A] $\frac{9}{56}$ [B] $\frac{9}{28}$ [C] $1\frac{11}{63}$ [D] $\frac{16}{63}$

21. Write an expression that represents the values in the table.

n	3	4	5	6
?	8	7	6	5

[A] n^{11}

[B] n^2

[C] $11-n$

[D] $11n$

22. Which shows the numbers ordered from least to greatest?

[A] -3, 2, -1, 0, -2, -4

[B] -3, -2, -1, 0, 2, -4

[C] -4, -3, -2, -1, 0, 2

[D] 0, -1, 2, -2, -3, -4

23. Choose the correct answer. A snail at the bottom of a well 12 feet deep crawls up 3 feet each day, but slips back 2 feet each night. How many days will it take the snail to reach the top of the well?

[A] 3 days

[B] 10 days

[C] 12 days

[D] 5 days

24. Solve the equation. $v + 19 = -3$

[A] $v = -22$

[B] $v = 16$

[C] $v = -16$

[D] $v = 22$

25. Neil's weekly scores in darts were 252, 622, 715, 398, 252, 164, and 320. What is the mode of Neil's weekly scores?

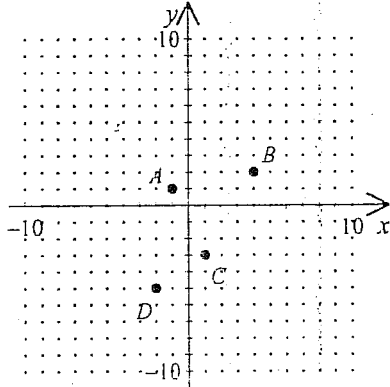
[A] 252

[B] 320

[C] 398

[D] 389

26. Identify the coordinates of the points A , B , C , and D .



[A] $A(-1, 1)$, $B(2, 4)$, $C(1, -3)$, $D(-5, -2)$

[B] $A(-1, 1)$, $B(4, 2)$, $C(1, -3)$, $D(-2, -5)$

[C] $A(1, -1)$, $B(2, 4)$, $C(-3, 1)$, $D(-5, -2)$

[D] $A(1, -1)$, $B(4, 2)$, $C(-3, 1)$, $D(-2, -5)$

27. A number cube is tossed. Find the probability of obtaining the number 5.

[A] $\frac{5}{6}$

[B] $\frac{1}{6}$

[C] 1

[D] $\frac{1}{2}$

28. Solve. $\frac{2}{6} = \frac{u}{102}$

[A] 12

[B] 17

[C] 34

[D] 36

29. Jed reads 18 pages every day. At that rate, how many pages will he read in 1 week?

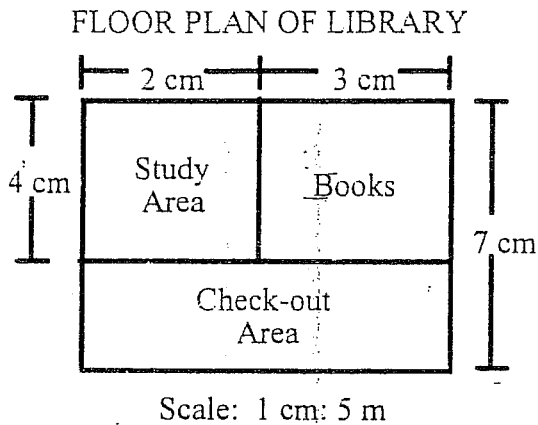
[A] 121 pages

[B] 136 pages

[C] 116 pages

[D] 126 pages

30. Choose the correct answer.



What are the actual dimensions of the study area?

- [A] $35\text{ m} \times 20\text{ m}$ [B] $10\text{ m} \times 20\text{ m}$ [C] $2\text{ m} \times 7\text{ m}$ [D] $5\text{ m} \times 3\text{ m}$

31. A chef has a recipe that serves 8 people and calls for $2\frac{1}{2}$ pounds of beef. If the chef wants to serve 24 people using the same recipe, how much beef will he need?

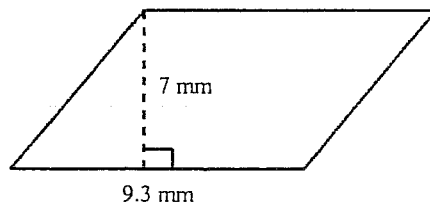
- [A] 5 lb [B] $5\frac{1}{2}$ lb [C] $7\frac{1}{2}$ lb [D] 10 lb

32. Write 62% as a decimal. [A] 0.62 [B] 0.062 [C] 6.2 [D] 0.0062

33. Write $\frac{4}{5}$ as a percent. [A] 45% [B] 80% [C] 12.5% [D] 0.8%

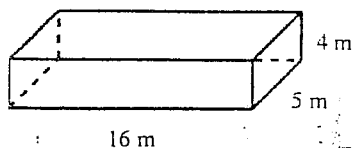
34. Find 80% of 40. [A] 32 [B] $\frac{8}{4}$ [C] 320 [D] 32%

35. Find the area of the parallelogram.



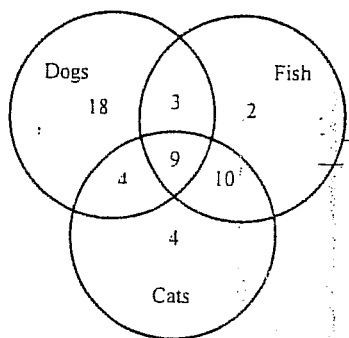
- [A] 86.49 sq mm [B] 37.2 sq mm [C] 65.1 sq mm [D] 32.6 sq mm

36. Find the volume of the rectangular prism.



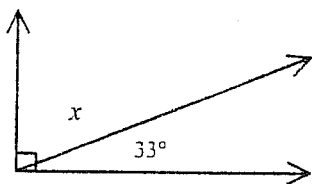
- [A] 328 cu m [B] 320 cu m [C] 25 cu m [D] 160 cu m
37. Add. $3 + (-11)$ [A] -14 [B] -8 [C] 14 [D] 8
38. Bill owns a small business. There was a loss of \$6 on Monday and a profit of \$19 on Tuesday. On Wednesday there was a loss of \$9 and on Thursday there was a profit of \$12. Find the total profit or loss.
- [A] \$21 profit [B] \$16 profit [C] \$46 loss [D] \$26 profit
39. Subtract. $-20 - (-8)$ [A] -28 [B] 12 [C] 28 [D] -12
40. Write 12.308 in expanded notation.
- [A] $(1 \times 10^1) + (2 \times 10^0) + (3 \times 10^{-1}) + (8 \times 10^{-3})$
[B] $(1 \times 10^2) + (2 \times 10^1) + (3 \times 10^0) + (8 \times 10^{-1})$
[C] $(1 \times 10^{-2}) + (2 \times 10^{-1}) + (3 \times 10^1) + (0 \times 10^2) + (8 \times 10^3)$
[D] $(1 \times 10^1) + (2 \times 10^0) + (3 \times 10^{-1}) + (10 \times 10^{-2}) + (8 \times 10^{-3})$
41. Write 3,570,000 in scientific notation.
- [A] 3.57×10^6 [B] 357×10^4 [C] 0.357×10^7 [D] 35.7×10^8
42. Account numbers for Northern Oil Company consist of five digits. If the first digit cannot be a 0 or 1, how many account numbers are possible?
- [A] 100,000 [B] 90,000 [C] 800,000 [D] 80,000
43. Evaluate. $4!$ [A] 24 [B] 10 [C] 9 [D] 176

44. Use the Venn diagram below. It shows the results of a survey of 50 seventh-grade pet owners to determine what type of pet(s) they had.

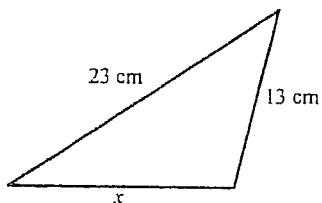


What is the probability that a seventh-grade pet owner had a cat, a dog, and a fish?

- [A] $\frac{12}{50}$ [B] $\frac{19}{50}$ [C] $\frac{13}{50}$ [D] $\frac{9}{50}$
45. Use an addition equation to solve for x . [A] 147 [B] -57 [C] 57 [D] -147



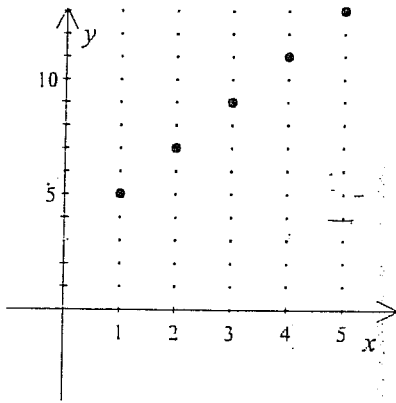
46. Which equation could be used to find the side length labeled x ?



Perimeter = 52 cm

- [A] $13 + 23 = x$ [B] $x = 13 + 23 - 52$ [C] $13 \cdot 23 = x$ [D] $52 = x + 13 + 23$
47. The area of a rectangle is 112 square centimeters. If its width is 14 cm, what is its length?
 [A] 8 cm [B] 98 cm [C] 1568 cm [D] 0.13 cm
48. Solve and check. $10y + 8.9 = 106.9$ [A] 11.58 [B] 88 [C] 105.8 [D] 9.8

49. From the graph of values, determine the function rule.



[A] $y = 2x + 3$

[B] $y = 3x + 2$

[C] $y = 4x + 1$

[D] $y = x + 4$

50. What is the area of a circular region whose diameter is 10 centimeters? Use $\pi \approx 3.14$.

[A] 62.8 sq cm

[B] 31.4 sq cm

[C] 314 sq cm

[D] 78.5 sq cm

Southeast Bulloch High School Fifth & Sixth Grade Mathematics Tournament
March 15, 2003
Fifth Grade Division Item Analysis

Number	Answer	Percent Wrong
1.	C	54%
2.	C	43%
3.	B	39%
4.	C	4%
5.	B	51%
6.	B	73%
7.	C	16%
8.	B	42%
9.	B	52%
10.	B	36%
11.	B	19%
12.	A	12%
13.	C	22%
14.	A	40%
15.	A	21%
16.	D	7%
17.	D	16%
18.	B	34%
19.	D	55%
20.	B	57%
21.	C	52%
22.	C	12%
23.	B	88%
24.	A	30%
25.	A	30%
26.	B	52%
27.	B	12%
28.	C	37%
29.	D	9%
30.	B	54%
31.	C	22%
32.	A	6%
33.	B	30%
34.	A	37%
35.	C	19%
36.	B	9%
37.	B	39%
38.	B	37%
39.	D	57%
40.	A	81%
41.	A	78%
42.	D	64%
43.	A	18%
44.	D	37%
45.	C	39%
46.	D	52%
47.	A	28%
48.	D	40%
49.	A	72%
50.	D	73%