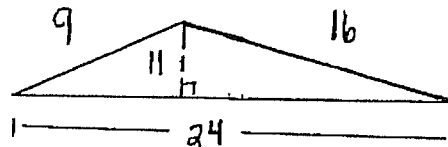


SEB MATH TOURNAMENT 2001

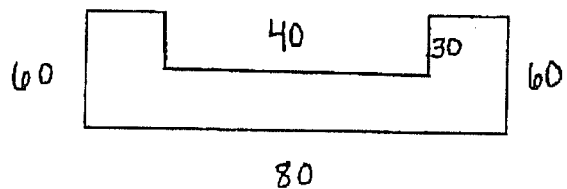
1. Jeff bought a pair of pants for \$45.95, 2 belts for 12.97 each, and a shirt for \$24.97. How much change did he receive from a \$100 bill?
  - a) \$16.21
  - b) \$4.24
  - c) \$17.21
  - d) \$3.14
  
2. Round to the nearest thousand.                      132,250
  - a) 133,000
  - b) 130,000
  - c) 132,000
  - d) 132,300
  
3. Divide                       $4993 \div 24$ 
  - a) 208 r 1
  - b) 208
  - c) 218 r 1
  - d) 207 r 25
  
4. Multiply                       $2\frac{3}{4} * 1\frac{1}{5}$ 
  - a) 2
  - b) 3
  - c) 3.3
  - d) 6.5
  
5. Holly bought 10 yards of fabric to recover 6 dining room chairs. Each chair took  $1\frac{1}{4}$  yards. How much fabric did she have left?
  - a)  $2\frac{1}{2}$
  - b) 4
  - c)  $4\frac{4}{5}$
  - d)  $7\frac{1}{2}$
  
6. Which of the following is in order from least to greatest.
  - a) .64, .604, .064, .06
  - b) .603, .75, .08, .098
  - c) .5, .064, .701, .901
  - d) .007, .069, .69, .7
  
7. What is the range for the following set of data?  
12, 73, 82, 17, 46
  - a) 5
  - b) 46
  - c) 70
  - d) 72

8. Gail's science grades were 80, 89, 92, and 71. What is the mean?  
 a) 21  
 b) 83  
 c) 85  
 d) 71
9.  $4(5 - 3) \div 4 + 3^2$   
 a)  $8/13$   
 b) 8  
 c) 11  
 d)  $13\frac{1}{4}$
10. If  $c = 5$  and  $d = 3$ , evaluate  $c^2 - 3d$ .  
 a) 1  
 b) 14  
 c) 16  
 d) 19
11. Which expression matches the statement. *Seventeen is two more than the product of eight and y.*  
 a)  $17 + 2 = 8y$   
 b)  $17 = 8y + 2$   
 c)  $17 = y(8 + 2)$   
 d)  $17 + 2 = 8 \div y$
12. 34% written as a decimal is  
 a) .34  
 b) 3.4  
 c) 34.0  
 d) 340
13. Find the area of the triangle.  
 a) 49  
 b) 132  
 c) 264  
 d) 3,456



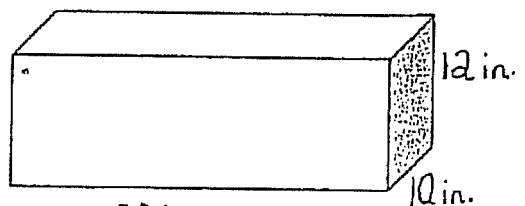
16. .45 written as a fraction.  
 a)  $\frac{9}{20}$   
 b)  $\frac{5}{9}$   
 c)  $\frac{4}{5}$   
 d)  $\frac{1}{45}$
17. 2 yd. 2 ft. 3 in. + 3 yd. 1 ft. 10 in.  
 a) 5 yd. 1 ft. 1 in.  
 b) 5 yd. 2 ft. 1 in.  
 c) 6 yd. 1 ft. 1 in.  
 d) 6 yd. 1 in.
18. Which is equal to 5 liters?  
 a) .005 ml  
 b) .05 kl  
 c) 5000 ml  
 d) 5000 kl
19. How would you express 40009.2 in scientific notation?  
 a)  $4.00092 \times 10^4$   
 b)  $4.00092 \times 10^{-4}$   
 c)  $4.00092 \times 10^6$   
 d)  $4.00092 \times 10^{-6}$

20. Find the perimeter of the figure.  
 a) 270  
 b) 280  
 c) 340  
 d) 360

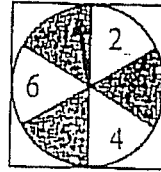


21.  $|-8| - |4|$   
 a) 4  
 b) -4  
 c) 12  
 d) -12
22. Find the area of a circle with radius 4 and  $\pi \approx 3.14$ .  
 a) 12.56  
 b) 16  
 c) 25.12  
 d) 50.24
23. The letters of the alphabet are printed on cards and turned face down. If you choose one card, what is the probability that the card is not a vowel. (a, e, i, o, u)  
 a)  $\frac{1}{26}$   
 b)  $\frac{21}{26}$   
 c)  $\frac{5}{26}$   
 d)  $\frac{1}{5}$

24. Evaluate  $5 + 3a - 4b$  when  $a = -2$  and  $b = 4$ .
- a) 14
  - b) -17
  - c) -49
  - d) -180
25.  $24 - 10 \div (3 - 5) + 4^2$
- a) 23
  - b) 25
  - c) 35
  - d) 45
26. What is the median of 27, 32, 16, 31, 9, 37?
- a) 31
  - b) 16
  - c) 28
  - d) 29
27.  $-17 + 6$
- a) -23
  - b) -11
  - c) 11
  - d) 23
28. If  $4x + 6 = 54$ , what is  $x$ ?
- a) 7
  - b) 12
  - c) 13
  - d) 8
29. Simplify: 4 hours 62 minutes 93 seconds
- a) 4 hours 2 minutes 33 seconds
  - b) 4 hours 3 minutes 33 seconds
  - c) 5 hours 3 minutes 33 seconds
  - d) 5 hours 4 minutes 33 seconds
30. Which of the following choices is the best estimate for the weight of a house cat?
- a) 4 kg
  - b) 40 kg
  - c) 40 g
  - d) 400 mg
31. What is the volume of the figure?

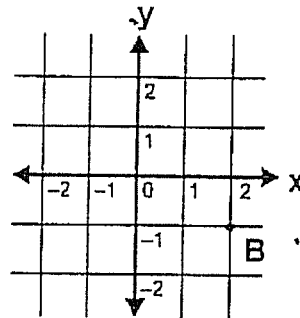


32. What is the probability the spinner will land on a shaded section or the number four?
- a)  $1/6$
  - b)  $1/3$
  - c)  $1/2$
  - d)  $2/3$



33.  $4\frac{1}{4}$  written as a percent is
- a) 4.14%
  - b) 41.4%
  - c) 42.5%
  - d) 425%

34. What are the coordinates of point B?
- a) (2, -1)
  - b) (-1, 2)
  - c) (-2, 1)
  - d) (1, -2)



35. In a group of 50 students, 26 are taking math, 20 are taking English, and 8 are taking both a math and an English course. How many students are taking neither math nor English?
- a) 6
  - b) 8
  - c) 10
  - d) 12
36. Solve the inequality:  $-2x + 4 > 10$
- a)  $x > -3$
  - b)  $x < -3$
  - c)  $x > 3$
  - d)  $x < 3$
37. Multiply  $(-3.6)(2.8)$
- a) -10.08
  - b) 10.08
  - c) -0.8
  - d) 10.8
38. The perimeter of a square is 64. What is its area?
- a) 64
  - b) 144
  - c) 256
  - d) 1024

39. 5 beach volleyball teams play each other twice in a tournament. How many total volleyball matches are played?
- a) 10
  - b) 20
  - c) 40
  - d) 50

40. Find the value of  $x$ .

- a) 15
- b) 20
- c) 30
- d) 60



#44

41.  $(2354)^0$

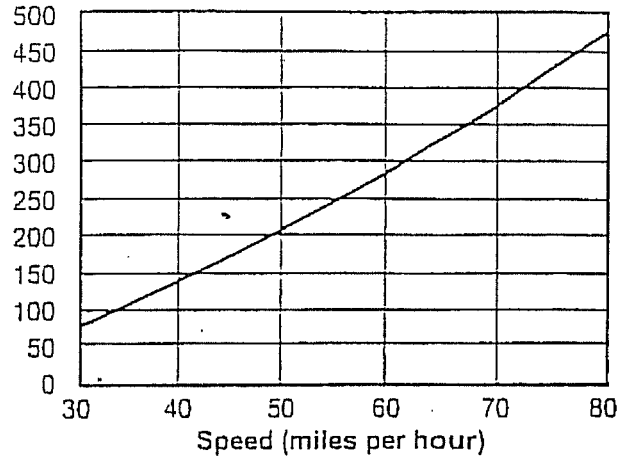
- a) 0
- b) 1
- c) 2354
- d) 23540

42.  $28,452 - 19,763$

- a) 1,689
- b) 8,689
- c) 11,311
- d) 8,621

Feet

STOPPING DISTANCES



43. On a blueprint 2 inches represents 3 feet.

How many feet wide is a bathroom that measures 9 inches?

- a) 6 feet
- b) 9 feet
- c) 13.5 feet
- d) 18 feet

44. According to the chart above, how many more feet does it take to stop a car traveling at 70 miles per hour than at 55 miles per hour?

- A. 175 feet
- B. 150 feet
- C. 125 feet
- D. 100 feet

45. According to the graph below, approximately what percent of people in the USA had a high school diploma in 1994?

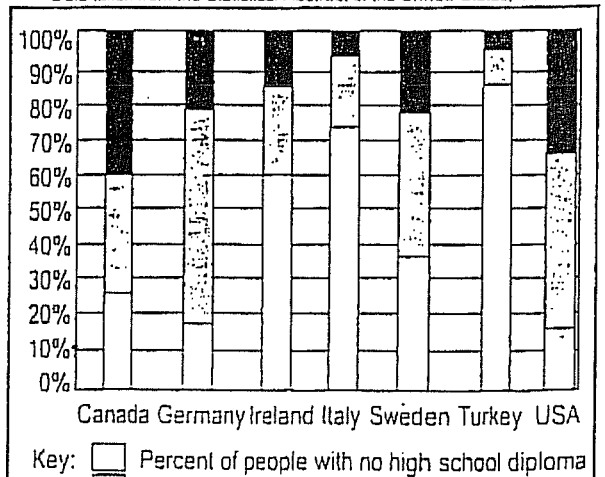
- A. 15%
- B. 50%
- C. 65%
- D. 75%

#45

LEVELS OF EDUCATION

Persons 25 to 64 Years Old

Data taken from the Statistical Abstract of the United States, 1994



Math Team 2001 Individual TEST

- |       |       |
|-------|-------|
| 1. D  | 34. A |
| 2. C  | 35. D |
| 3. A  | 36. B |
| 4. C  | 37. A |
| 5. A  | 38. C |
| 6. D  | 39. B |
| 7. C  | 40. A |
| 8. B  | 41. B |
| 9. C  | 42. B |
| 10. C | 43. C |
| 11. B | 44. C |
| 12. A | 45. B |

- 13. B
- 14. C
- 15. D
- 16. A
- 17. C
- 18. C
- 19. A
- 20. C
- 21. A
- 22. D
- 23. B
- 24. B
- 25. D
- 26. D
- 27. B
- 28. B
- 29. C
- 30. A
- 31. D
- 32. D
- 33. D
- 34.

Ciphering 2001 Answers

- 1. 2062
- 2. 12
- 3.  $3\frac{5}{6}$
- 4. 12, 13, 14, 15, 16
- 5. 10km
- 6. 50
- 7. 1400
- 8. 1:17
- 9. 15
- 10. B
- 11. July 11
- 12. 95
- 13. 12
- 14. 126
- 15. 30 min.
- 16. 42