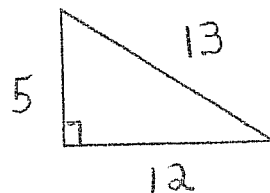


SEB MATH TOURNAMENT 2000

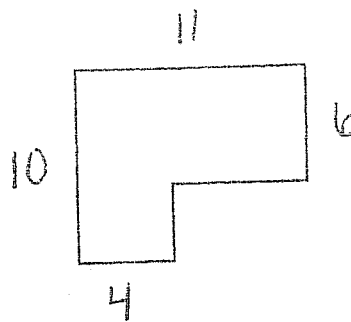
1. On 6/30, Tom opened a checking account with \$550 deposit. On 7/3, he wrote checks for \$45.78 and \$32.99. On 7/15, he deposited \$200. What is Tom's new balance?
  - a) \$671.23
  - b) \$428.77
  - c) \$671.22
  - d) \$428.76
  
2. Round to the nearest ten thousand. 39,678
  - a) 39,700
  - b) 39,000
  - c) 40,000
  - d) 39,680
  
3.  $1242 \div 52$ 
  - a) 23 r 46
  - b) 24
  - c) 24 r 8
  - d) 24 4 18
  
4.  $4 \frac{5}{6}$  written as a decimal
  - a) .456
  - b) 4.56
  - c)  $4.8\bar{3}$
  - d)  $.48\bar{3}$
  
5. Which is the best buy?
  - A 3 candy bars for \$0.96
  - B 4 candy bars for \$1.00
  - C 5 candy bars for \$1.20
  - D 6 candy bars for \$2.10
  
6. What is the mode for the following set of numbers?  
12, 17, 12, 23, 37, 12, 11, 17
  - a) 19
  - b) 26
  - c) 15
  - d) 12

7. What is the mean of 12, 23, 8, 26, 37, 11, and 9?  
a) 12  
b) 29  
c) 18  
d) 19
8.  $14 - 5 + 2 * 3$   
a) -7  
b) 14  
c) 15  
d) 33
9. If  $x - 12 = 4$ , what is  $x$ ?  
a) 5  
b) 6  
c) 16  
d) 20
10. Dane is three years older than twice his brother's age,  $b$ . Which algebraic expression below represents Dane's age?  
a)  $b + 3$   
b)  $2b + 3$   
c)  $3 - 2b$   
d)  $2b - 3$
11. 7.02 is the same as  
a) 7.02%  
b) 70.2%  
c) 702%  
d) .0702 %
12. Find the area of the triangle.



13. What percent of 200 is 120?  
a) 12%  
b) 20%  
c) 55%  
d) 60%
14.  $2 \frac{5}{8} + 5 \frac{2}{3} + \frac{1}{2}$   
a)  $7 \frac{1}{3}$   
b)  $7 \frac{8}{13}$   
c)  $8 \frac{1}{2}$   
d)  $8 \frac{19}{24}$
15. What is the greatest common factor of 36 and 120?  
a) 2  
b) 6  
c) 12  
d) 18
16.  $1 \frac{3}{4} \div 2 \frac{5}{8}$   
a)  $\frac{1}{2}$   
b)  $\frac{2}{3}$   
c)  $\frac{7}{8}$   
d)  $1 \frac{1}{2}$
17. 3 lb. 6 oz. - 2 lb. 10 oz.  
a) 1 lb. 4 oz.  
b) 1 lb. 12 oz.  
c) 8 oz.  
d) 12 oz.
18. Which is a *reasonable* answer?  $74,295 - 62,304$   
a) 13,000  
b) 12,000  
c) 11,000  
d) 9,000

19. Find the perimeter of the figure.
- a) 30
  - b) 40
  - c) 42
  - d) 74



20.  $-42.3 + 21.9$
- a)  $-64.2$
  - b)  $-20.4$
  - c)  $64.2$
  - d)  $20.4$

21. Find the circumference of a circle with radius 6 and  $\pi \approx 3.14$ .
- a) 18.84
  - b) 9.42
  - c) 37.68
  - d) 113.04

22. I have a bag containing 8 green, 5 red, and 9 blue marbles. What is the probability of not drawing a green?
- a)  $4/11$
  - b)  $5/22$
  - c)  $13/22$
  - d)  $7/11$

23. Evaluate:  $(3z + 5) / 4w$      $z = 5$      $w = -1$
- a)  $-3 \frac{1}{4}$
  - b)  $1/10$
  - c)  $-5$
  - d)  $6 \frac{2}{3}$

24.  $(12 - 6) + 27 \div 3^2$
- a) 87
  - b) 121
  - c) 9
  - d)  $3 \frac{2}{3}$

25. What is the median of 10, 12, 8, 4, 2, and 16?

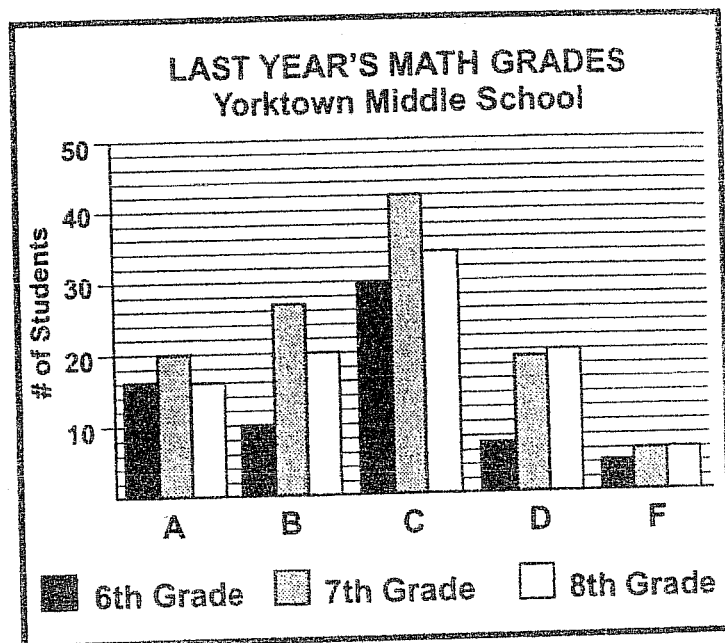
- a) 8
- b) 9
- c) 26
- d) 14

26.  $(-4)(-2)(-3)(-5)(-1)$

- a) 15
- b) -15
- c) 120
- d) -120

27. Solve for x:  $\frac{4x + 8}{3} = 8$

- a) 3
- b) 4
- c) 5
- d) 6



Use the chart to answer questions 28 – 30.

28. What percent of F students were in the 6<sup>th</sup> grade?

- a) 50%
- b) 25%
- c) 30%
- d) 16%

29. How many of last year's 6<sup>th</sup> graders made C's in math.

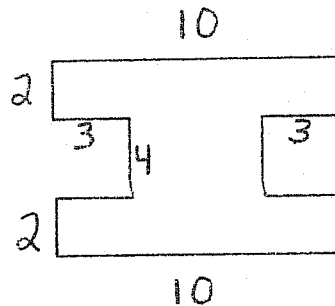
- a) 28
- b) 42
- c) 34
- d) 30

30. How many 8<sup>th</sup> graders took math last year?

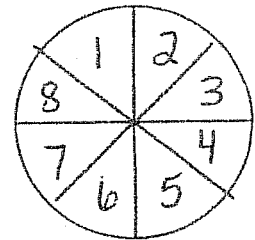
- a) 92
- b) 94
- c) 96
- d) 98

31. Simplify: 1 week 8 days 50 hours
- 2 weeks 2 days 2 hours
  - 2 weeks 3 days 2 hours
  - 2 weeks 5 days 2 hours
  - 3 weeks 2 days

32. What is the area of the figure?
- 40
  - 56
  - 64
  - 42



33. What is the probability the spinner lands on a multiple of 3?
- $\frac{1}{2}$
  - $\frac{1}{6}$
  - $\frac{1}{3}$
  - $\frac{1}{4}$



34. Two trains 120 miles apart left at 9:00 a.m. heading toward each other. If train A travels at 30 mph and train B travels at 20 mph, how far apart are the trains at 10:30 a.m.?
- 35 miles
  - 45 miles
  - 55 miles
  - the trains crashed
35. In a group of 40 students, 18 are taking a math course, 26 are taking an English course, and 12 are taking both a math and an English course. How many students are taking neither a math nor English course?
- 6
  - 8
  - 10
  - 12

36. Jane knows a secret. She tells three friends who then each tell four friends the secret. The four friends each tell five friends the secret. How many people know the secret?
- a) 75
  - b) 76
  - c) 60
  - d) 36
37. Solve the inequality:  $-3x + 5 < 11$
- a)  $x < -18$
  - b)  $x > -18$
  - c)  $x < -2$
  - d)  $x > -2$
38. Bettinger's Department Store is having a 30% discount sale on all golf clubs. If a set of irons originally cost \$675, what is the sale price including a 6% sales tax?
- a) \$500.85
  - b) \$472.50
  - c) \$444.15
  - d) \$545.50
39. Find the perimeter of a square that has an area of 81.
- a) 162
  - b) 9
  - c) 36
  - d) 434
40. Alice has 63 cents in dimes, nickels, and pennies. If she has 12 coins, how many nickels does she have?
- a) 4
  - b) 5
  - c) 6
  - d) 7

## CIPHERING ANSWERS

1. 5
2. 156
3.  $3/2$  or 1.5
4. 96
5. 205
6. -2
7. 12 hours 42 minutes
8. 4 minutes
9.  $33/28$  or  $1 \frac{5}{28}$
10. 525,600
11.  $\frac{1}{2}$  or .5
12. 2025
13. 34 cents
14. V
15. 5 nickels, 5 dimes, 5 quarters
16. 23

## INDIVIDUAL TEST ANSWERS

- |       |       |       |       |
|-------|-------|-------|-------|
| 1. A  | 11. C | 21. C | 31. B |
| 2. C  | 12. C | 22. D | 32. B |
| 3. A  | 13. D | 23. C | 33. D |
| 4. C  | 14. D | 24. C | 34. B |
| 5. C  | 15. C | 25. B | 35. B |
| 6. D  | 16. B | 26. D | 36. B |
| 7. C  | 17. D | 27. B | 37. D |
| 8. C  | 18. B | 28. B | 38. A |
| 9. C  | 19. C | 29. D | 39. C |
| 10. B | 20. B | 30. C | 40. C |