Basic Skills Test

Mathematics

B

1. Choose another name for: $ 105.38

A. Ten thousand five hundred thirty-eight dollars.

B. One hundred five dollars and thirty-eight cents.

C. One hundred fifty dollars and thirty-eight cents.

D. Fifteen dollars and thirty-eight cents

E ?

2. ADD:
397
468
+ 245

A. 1,100

B. 1,000

C. 91,920

D. 1,110

E. ?

3. ADD: $575.95 + $129.95 = ☐

A. $705.90

B. $446.90

C. $454.00

D. $695.80

E. ?

4. SUBTRACT:
$530.00
- 468.75

A. $171.25

B. $31.25

C. $61.25

D. $71.25

E. ?

5. SUBTRACT:
29,836 – 15,016 = ☐

A. 14,826

B. 4,820

C. 4,840

D. 14,820

E. ?

6. MULTIPLY:
78
x 67

A. 4,286

B. 5,226

C. 1,014

D. 4,386

E. ?

7. MULTIPLY: 472 x 396 = ☐

A. 186,912

B. 196,902

C. 187.812

D. 197,012

E. ?

8. DIVIDE: $9\overline{)496}$

A. 10 r6

B. 50 r6

C. 55 r1

D. 66 r1

E. ?

9. DIVIDE: $37\overline{)2,368}$

A. 74

B. 704

C. 64

D. 604

E. ?

10. DIVIDE: $98\overline{)7,886}$

A. 91 r3

B. 8 r6

C. 8 r46

D. 80 r46

E. ?

11. Choose another name for $\frac{7}{8}$.

A. $\frac{24}{28}$

B. $\frac{21}{24}$

C. $\frac{14}{18}$

D. $\frac{10}{11}$

E. ?

12. Rename $\frac{24}{36}$ in simplest form (lowest term)

A. $\frac{1}{2}$

B. $\frac{3}{4}$

C. $1\frac{1}{2}$

D. $\frac{2}{3}$

E. ?

13. Choose a <u>common denominator</u> for $\frac{5}{6}$ and $\frac{1}{4}$.

A. 12

B. 6

C. 2

D. 10

E. ?

14. Choose the symbol that makes the sentence true. $\frac{5}{6} \bigcirc \frac{7}{9}$

A. $<$

B. $>$

C. $=$

D. $\not=$

E. ?

15. Choose another name for $\frac{37}{8}$.

A. $\frac{8}{37}$

B. $4\frac{5}{37}$

C. $4\frac{1}{8}$

D. $4\frac{5}{8}$

E. ?

16 ADD: $3\frac{2}{5} + 2\frac{1}{5} = \square$

A. $5\frac{3}{5}$

B. $5\frac{3}{10}$

C. $5\frac{1}{5}$

D. $5\frac{2}{10}$

E. ?

17. SUBTRACT: $10\frac{5}{12} - 4\frac{5}{12} = \square$

A. $6\frac{5}{12}$

B. $6\frac{10}{12}$

C. 6

D. $6\frac{1}{12}$

E. ?

18. ADD: $5\frac{2}{3} + 2\frac{1}{4} = \square$

A. $7\frac{11}{12}$

B. $7\frac{3}{7}$

C. $3\frac{1}{4}$

D. $7\frac{3}{12}$

E. ?

19. ADD:(Rename in simplest form)

$7\frac{3}{5} + 4\frac{2}{3} =$ ☐

A. $11\frac{5}{8}$

B. $12\frac{4}{15}$

C. $11\frac{19}{15}$

D. $11\frac{1}{2}$

E. ?

20. SUBTRACT: $8\frac{1}{7} - 5\frac{2}{3} =$ ☐

A. $3\frac{11}{21}$

B. $2\frac{1}{21}$

C. $2\frac{10}{21}$

D. $3\frac{10}{21}$

E. ?

21. MULTIPLY: (Rename in simplest form) $\frac{6}{7} \times \frac{1}{3} =$ ☐

A. $\frac{2}{7}$

B. $\frac{7}{10}$

C. $2\frac{4}{7}$

D. $\frac{3}{7}$

E. ?

22. MULTIPLY: (Rename in simplest form) $4\frac{2}{7} \times 2\frac{4}{5} =$ ☐

A. $8\frac{8}{35}$

B. $1\frac{26}{49}$

C. 12

D. $\frac{1}{12}$

E. ?

23. MULTIPLY: (Rename in simplest form) $\frac{3}{4} \times 8 =$ ☐

A. $\frac{3}{32}$

B. $\frac{24}{32}$

C. $\frac{1}{6}$

D. 6

E. ?

24. DIVIDE: (Rename in simplest form) $\frac{5}{8} \div \frac{3}{4} =$ ☐

A. $\frac{15}{32}$

B. $\frac{5}{6}$

C. $\frac{2}{3}$

D. $\frac{1}{4}$

E. ?

25. DIVIDE: (Rename in simplest form) $1\frac{2}{3} \div 3\frac{5}{6} =$ ☐

A. $2\frac{3}{10}$

B. $\frac{10}{23}$

C. $6\frac{7}{18}$

D. $\frac{4}{5}$

E. ?

26. DIVIDE: (Rename in simplest form) $\frac{5}{6} \div 5 =$ ☐

A. $4\frac{1}{6}$

B. 6

C. $\frac{1}{6}$

D. $\frac{6}{25}$

E. ?

27. Choose the symbol that makes the sentence true. $4.73 \bigcirc 4.703$

A. $>$

B. $<$

C. $=$

D. $\not=$

E. ?

28. Choose another name for $2\frac{3}{4}$.

A. 2.34

B. 2.43

C. 2.7

D. 2.75

E. ?

29. ADD: $4.3 + 6 + .091 + 17.72 =$ ☐

A. 22.711

B. 28.111

C. 19.12

D. 12.982

E. ?

30. SUBTRACT: $35 - 14.96 =$ ☐

A. 21.96

B. 14.61

C. 14.29

D. 20.04

E. ?

31. MULTIPLY: $18.95 x .4 = ☐

A. $75.80

B. $758.00

C. $7,580.00

D. $7.58

E. ?

32. DIVIDE: $129.42 ÷ .03 = ☐

A. $43.14

B. $4,314.00

C. $4.314

D. $.4314

E. ?

33. Find another name for $\frac{5}{8}$.

A. 58%

B. $1\frac{3}{5}\%$

C. $62\frac{1}{8}\%$

D. 62.5%

E. ?

34. FIND: 60% of 600 = ☐

A. 10

B. 36

C. 360

D. 540

E. ?

35. Find the simple interest on $2,000 borrowed for one year at 10%.

A. $20,000.00

B. $200.00

C. $20.00

D. $2.00

E. ?

36. Find the perimeter of the triangle.

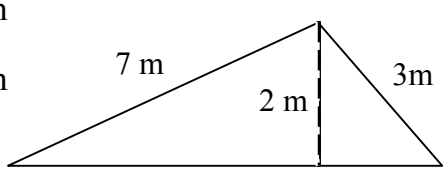
A. 20 m

B. 24 m

C. 56 m

D. 18 m

E. ?



37. Find the length of the paper clip.

m

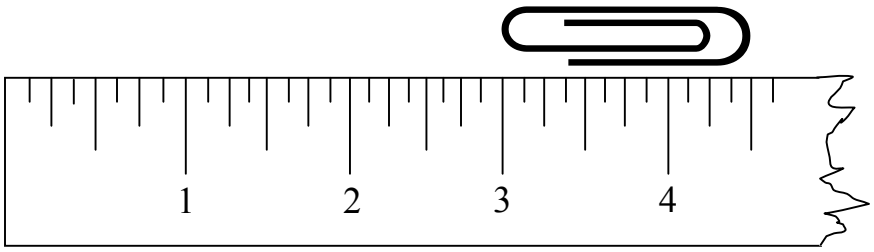
A. $4\frac{1}{4}$ inches

B. $1\frac{1}{4}$ inches

C. $1\frac{1}{2}$ inches

D 3 inches

E. ?



38. Find the area of the rectangle.

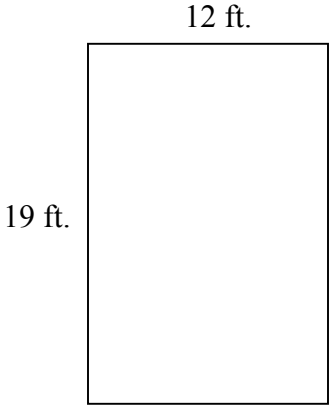
A. 228 sq. ft.

B. 31 sq. ft.

C. 62 sq. ft.

D. 114 sq. ft.

E. ?



39. Choose the correct answer.

A. 24 inches

B. 1 inch

C. 144 inches

D. 36 inches

E. ?

12 feet = _____ inches

40. Choose the correct answer.

A. 41 oz.

B. 83 oz.

C. 53 oz.

D. 35 oz.

E. ?

3 lb. 5oz. = _____ oz.

41. Choose the correct answer.

A. 9 gal. 1 qt.

B. 4 gal. 3 qts.

C. 2 gal. 3 qts.

D. 3 gal. 4 qts.

E. ?

19 qts. = _____ gal. _____qts.

42. Choose the correct answer.

A. 11 hrs. 2 min.

B. 2 hrs.

C. 1 hr. 12 min.

D. 1 hr. 52 min.

E. ?

112 min. = _____ hrs. _____ min.

43. Choose the correct answer.

A. 6

B. $13\frac{1}{2}$

C. $9\frac{2}{3}$

D. $8\frac{1}{3}$

E. ?

Linda is making a 9-layer birthday cake. She needs $\frac{2}{3}$ of a pound of sugar for each layer of frosting. How many pounds of sugar does she need?

44. Choose the correct answer.

A. 18

B. 6

C. 16

D. 9

E. ?

Jim is $\frac{3}{4}$ as old as hid brother. If Jim is 12 years old, how old is his brother?

45. Choose the correct answer.

A. $\frac{14}{15}$

B. $\frac{1}{15}$

C. $\frac{1}{5}$

D. $\frac{13}{14}$

E. ?

Elton Garrett Junior High School has 750 students. Last Monday, 50 students were absent. What fractional part of the student body was present?

46. Choose the correct answer.

A. $32.00

B. $28.56

C. $20.23

D. $7.00

E. ?

During the aluminum can drive Scout Troup #320 collected 2,856 cans. If they received $.17 per pound and it took 24 cans to make a pound, how much money did they receive?

47. Use the table below to answer the following problem.

A. Buffalo

B. Las Vegas

C. San Francisco

D. Honolulu

E. ?

Which city has the greatest difference in temperature for June and December?

City	Average Temperature June	Average Temperature December
Buffalo	73°	30°
Las Vegas	95°	60°
San Francisco	57°	51°
Honolulu	78°	74°

48. Use the circle graph below to answer the following problem.

A. 10%

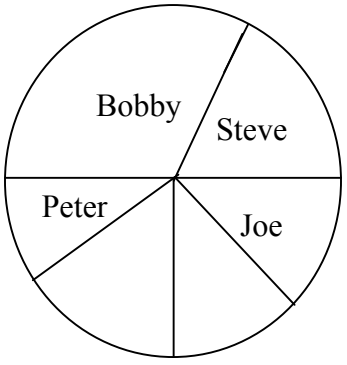
B. 15%

C. 25%

D. 50%

E. ?

What percent of the points scored were made by Bobby and Steve combined?



Frank Jim

49. Choose the best <u>estimate</u> for the following problems.

A. $5,200

B. $1,300

C. $7,800

D. $2,000

E. ?

The regular price of a truck is $6,530. During a sale, it is advertised at a discount of 20%. ESTIMATE the amount of <u>discount</u> on the truck.

50. Choose the best <u>estimate</u> for the following problem.

A. $60.00

B. $30.00

C. $80.00

D. $70.00

E. ?

The regular price of a coat is $89.25. During a sale, it is advertised at $\frac{1}{3}$ off. ESTIMATE the sale price of the coat.

51. Choose the set that shows fractions ordered from <u>least to greatest</u>.

A. $\{\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \frac{7}{10}\}$

B. $\{\frac{2}{3}, \frac{1}{2}, \frac{3}{4}, \frac{7}{10}\}$

C. $\{\frac{1}{2}, \frac{2}{3}, \frac{7}{10}, \frac{3}{4}\}$

D. $\{\frac{7}{10}, \frac{3}{4}, \frac{2}{3}, \frac{1}{2}\}$

E. ?

52. Choose the <u>additive inverse</u> of $-\frac{3}{4}$.

A. $-\frac{4}{3}$

B. $\frac{4}{3}$

C. $-\frac{3}{4}$

D. $\frac{3}{4}$

E. ?

53. Choose the number whose <u>prime factorization</u> is $5^2 \cdot 3^2 \cdot 2$.

A. 120

B. 450

C. 180

D. 30

E. ?

54. Choose the number that is written in <u>scientific notation</u>.

A. 93 x10

B. 9.3 x 10□

C. 9.3×10^{10}

D. .93 x 10□

E. ?

55. Choose .000075 written in <u>scientific notation</u>.

A. 7.5×10^{-5}□

B. 75×10^{-6}

C. 7.5 x 10□

D. 75×10^{6}

E. ?

56. Solve: -|8|

A. 8

B. $\frac{1}{8}$

C. $^{-}8$

D. $\sqrt{8}$

E. ?

57. Solve: $-\sqrt{\frac{9}{100}}$

A. $-\frac{3}{10}$

B. $\frac{3}{10}$

C. $-\frac{9}{100}$

D. $\frac{9}{100}$

E. ?

58. Solve: 160% of 80 = ☐

A. 168

B. 140

C. 60

D. 128

E. ?

59. Solve: $66\frac{2}{3}$% of 186 = ☐

A. 248

B. 31

C. 124

D. 62

E. ?

60. Solve: 150% of _____ = 75

A. 50

B. 300

C. $112\frac{1}{2}$

D. 200

E. ?

61. Solve: 8.5 % of 60 = ☐

A. 510

B. 5.1

C. 78

D. 68.5

E. ?

62. Solve for x: x % of 600 = 480

A. $\frac{4}{5}$

B. 125

C. 120

D. 80

E. ?

63. ADD: $^{-}13 + {}^{-}7 + 12 =$ ☐

A. $^{-}18$

B. 18

C. 42

D. $^{-}42$

E. ?

64. SUBTRACT: $^{-}11 - {}^{-}13 =$ ☐

A. $^{-}24$

B. 24

C. 2

D. $^{-}2$

E. ?

65. MULTIPLY: $^{-}4 \times {}^{-}7 \times 5 =$ ☐

A. $^{-}7$

B. 7

C. $^{+}_{-}140$

D. 140

E. ?

66. DIVIDE: $\frac{-175}{-7}$

A. $^{-}12$

B. 25

C. $^{-}252$

D. 168

E. ?

67. ADD: $6.03 + {}^{-}.147 =$ ☐

A. 5.883

B. 4.56

C. 6.177

D. $^{-}4.56$

E. ?

68. SUBTRACT: $4\frac{1}{8} - {}^{-}2\frac{3}{5} =$ ☐

A. $2\frac{2}{3}$

B. $1\frac{21}{40}$

C. $6\frac{29}{40}$

D. $-1\frac{21}{40}$

E. ?

69. MULTIPLY: $^{-}2\frac{1}{2} \times {}^{-}4\frac{3}{4} =$ ☐

A. $-11\frac{7}{8}$

B. $-8\frac{3}{8}$

C. $11\frac{7}{8}$

D. $8\frac{3}{8}$

E. ?

70. DIVIDE: $^{-}.5472 \div 1.8 =$ ☐

A. .34

B. +.304

C. -.34

D. -.304

E. ?

71. MULTIPLY: $4^3 \bullet 4^3 =$ ☐

A. 16^9

B. 4^6

C. 4^9

D. 16^6

E. ?

72. FIND: $\frac{12^{10}}{12^2}$ ☐

A. 12☐

B. 1^8

C. 1☐

D. 12^8

E. ?

73. FIND: $(10^2)^3$

A. 100,000,000

B. 80

C. 1,000,000

D. 100

E. ?

74. FIND: _____ - 24 = 24

A. 0

B. 48

C. 1

D. -1

E. ?

75. FIND:

A. $^{-}5$

B. 5 $\qquad$ _____ $\div {}^{-}5 = {}^{-}25$

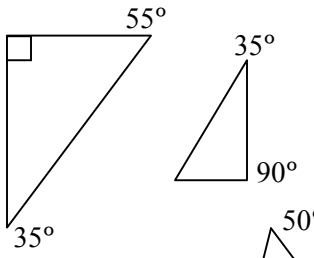
C. $^{-}125$

D. 125

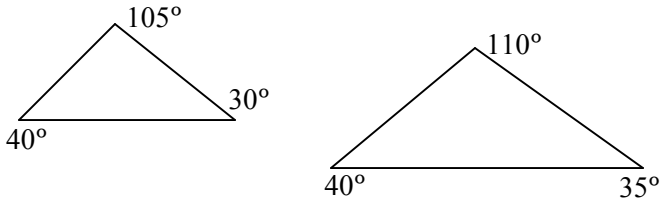
E. ?

76. Choose the pair of <u>similar</u> triangles.

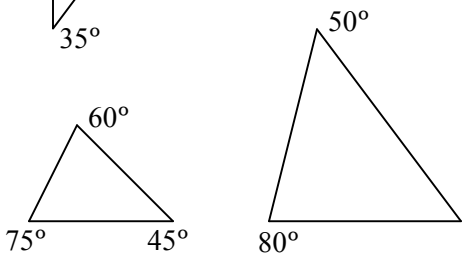
A.)



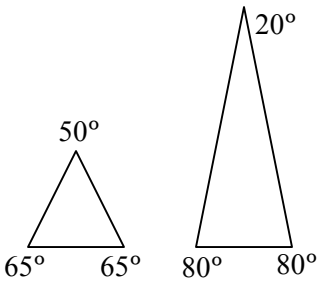
C.)



B.)



D.)



E.) ?

77. Find the <u>length</u> of side a. $(a^2 + b^2 = c^2)$

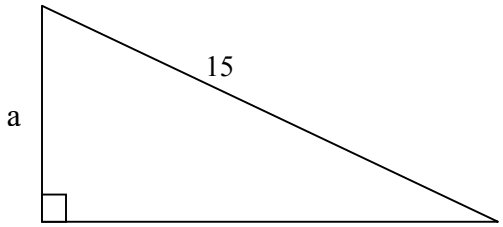
A. 3

B. 27

C. 9

D. 81

E. ?



78. Given Δ RST ~ Δ XYZ, find the length of YZ.

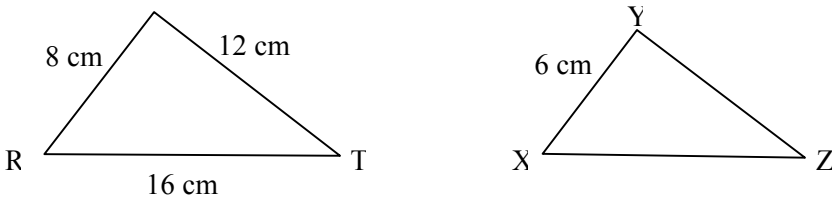
A. 9 cm

B. 10 cm

C. 15 cm

D. 4 cm

E. ?



79. Solve the following problem.

A. 170 inches

B. $8\frac{1}{2}$ inches

C. 17 inches

D. 17 miles

E. ?

On a map, $\frac{1}{2}$ inch represents 5 miles.

Find the number of inches representing 85 miles.

80. Solve the following problem.

A. 16 ft².

B. 144 ft².

C. 36 ft².

D. 12 ft².

E. ?

4 sq. yd. = _____ sq. ft.

81. Find the <u>perimeter</u> of the polygon.

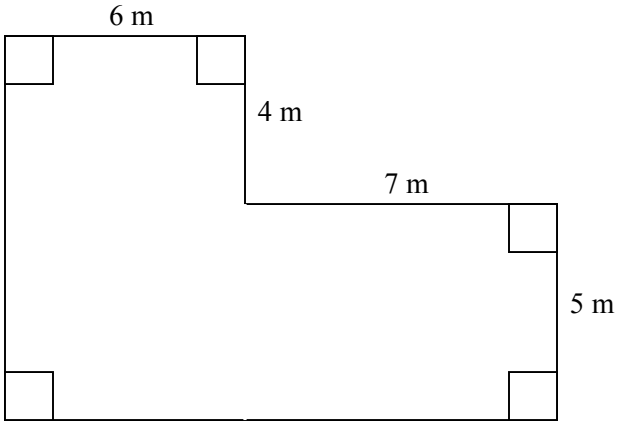
A. 44 m

B. 22 m

C. 88 m

D. 127 m

E. ?



82. Find the <u>area</u> of trapezoid WXYZ. $A = \frac{1}{2}h(a + b)$

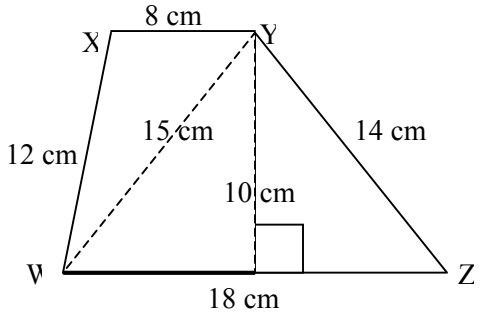
A. 80 cm²

B. 120 cm²

C. 130 cm²

D. 180 cm²

E. ?



83. Find the <u>volume</u> of the rectangle prism.

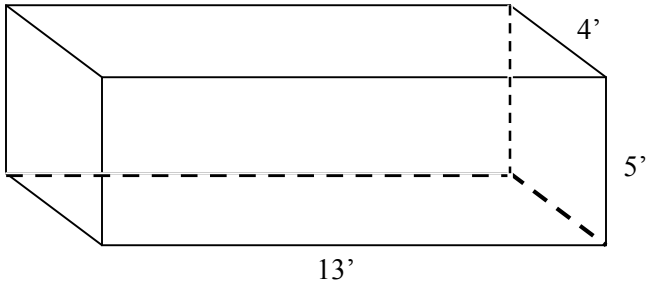
A. 52 ft³.

B. 85 ft³.

C. 117 ft³

D. 260 ft³.

E. ?



84. Find the area of the circle. $A = \pi r^2$ $\pi = \frac{22}{7}$

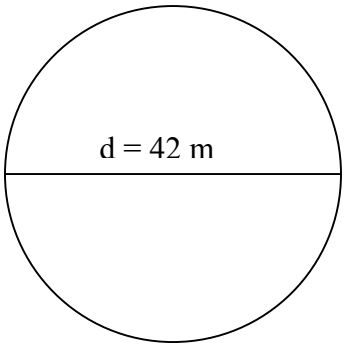
A. 66 m²

B. 1,386 m²

C. 5,544 m²

D. 132 m²

E. ?



85. Find the circumference of the circle $C = \pi d$ $\pi = 3.14$

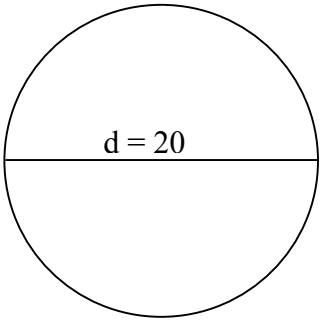
A. 23.15

B. 62.80

C. 6,280

D. 2,314

E. ?



86. Find the surface area of this rectangular solid.

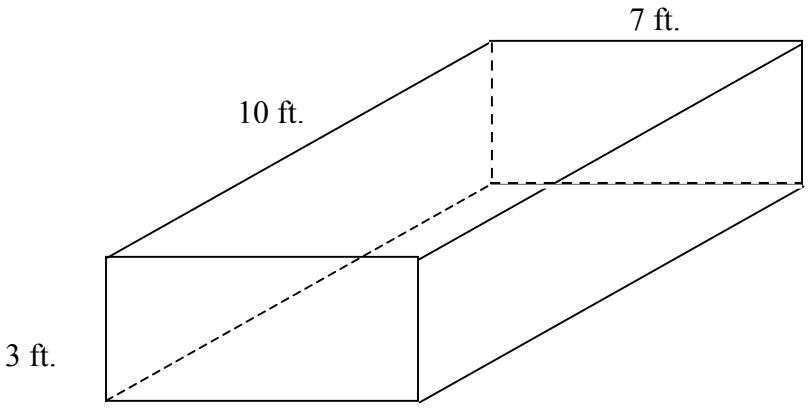
A. 210 ft².

B. 172 ft².

C. 242 ft².

D. 121 ft².

E. ?



87. Find the total surface area of the cylinder. $A = 2\pi rh + 2\pi r^2$ $\pi = 3.14$

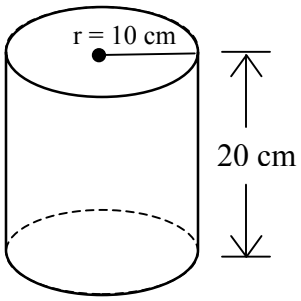
A. 1,884 cm^2

B. 1,381.6 cm^2

C. 1,256 cm^2

D. 628 cm^2

E. ?



88. Choose the best estimate for the following problem.

A. $3.00

B. $16.00

C. $5.00

D. $4.00

E. ?

George bought a belt for $7.49; a shirt for $6.49; and two pair of socks for 98¢ each. How much change did he receive from $20.00?

89. Choose the best estimate for the following problem.

A. 6 inches

B. 12 inches

C. 10 inches

D. 60 inches

E. ?

A rope 58.7 inches long is cut into 5 pieces, all the same length. How long is each piece?

90. Choose the best estimate for the following problem.

A. 200

B. 1,200

C. 300

D. 1,300

E. ?

Approximately $\frac{1}{8}$ of the students at Highland Park Jr. High School ride the bus to school. If there are 1,543 students, how many walk to school?

91. Solve the following problem.

A. 30 gallons

B. 67.5 gallons

C. 240 gallons

D. 9 gallons

E. ?

John drove 38 miles, 62 miles, 113 miles, and 57 miles. His car gets 30 miles per gallon of gas. How much gas did he use?

92. Solve the following problem.

A $72.00

B. $51.00

C. $24.00

D. $30.00

E. ?

The student council earns 30% of the sales from the magazine drive. Mr. Hicks' home room sold the following subscriptions: 7 at $5.00 each; 3 at $7.00 each; 5 at $7.50 each; and 9 at $8.50 each. How much money did the student council earn from these sales?

93. Solve the following problem.

A. $7.20

B. $4.50

C. $15.00

D. $5.00

E. ?

Sam can buy 12 cans of corn for $3.00.
How much will 20 cans cost?

94. Solve the following problem.

A. $82.50

B. $30.80

C. $85.80

D. $80.85

E. ?

Linda bought 3 dresses at $27.50 each.
The sales tax is 4%. Find the total price
Linda paid for the dresses.

95. Solve the following problem.

A. 24

B. 23

C. 52

D. 53

E. ?

How many books 1½ inch wide can be placed
on a shelf measuring 35 inches?

96. Solve the following problem.

A. 10 hours

B. 5 hours

C. 3 hours

D. 7 hours

E. ?

During an average day Alice spends $\frac{1}{4}$ of her time at school, $\frac{1}{12}$ of her time eating meals, $\frac{1}{24}$ doing homework, and $\frac{1}{8}$ of the time at play. How many hours are spent at school and on homework combined?

97. Solve the following problem.

A total of 1,200 students voted in the student council elections. How many votes did the winner receive?

A. 240

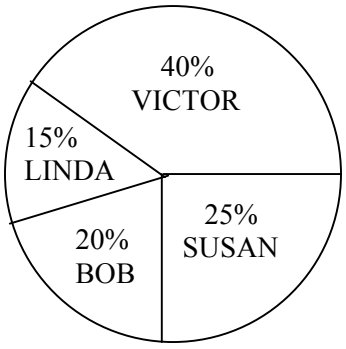
B. 480

C. 300

D. 180

E. ?

ELECTION RESULTS



98. Use the circle graph to answer the following problem.

The state of Nevada's budget is $150 million a year. How much more money is spent on education than on highways?

A. $15 million

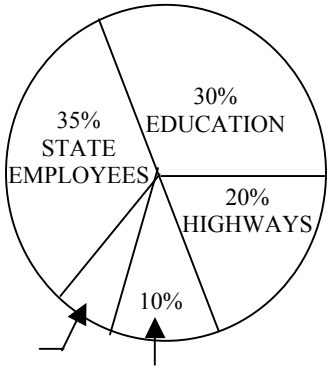
B. $45 million

C. $30 million

D. $10 million

E. ?

NEVADA'S BUDGET



99. Use the double-bar graph to answer the following problem.

Which student's score shows the least amount of increase from 1977 to 1978?

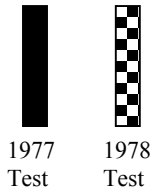
A. Jackie

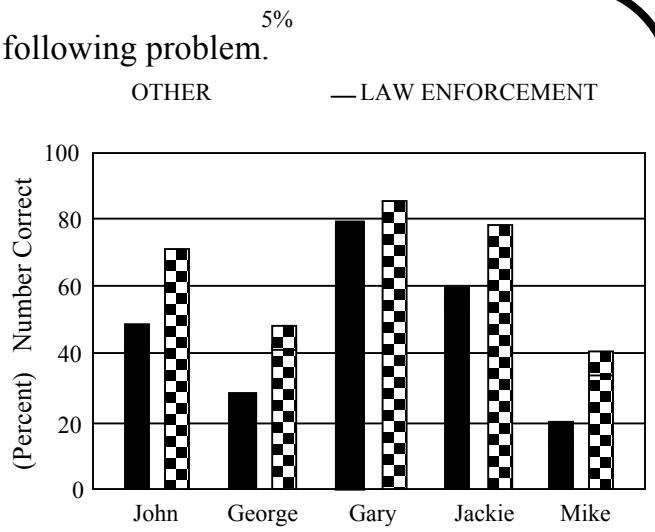
B. Mike

C. Gary

D. George

E. ?





100. Use the bar graph to answer the following problem.

Find the number of boys under 5'4".

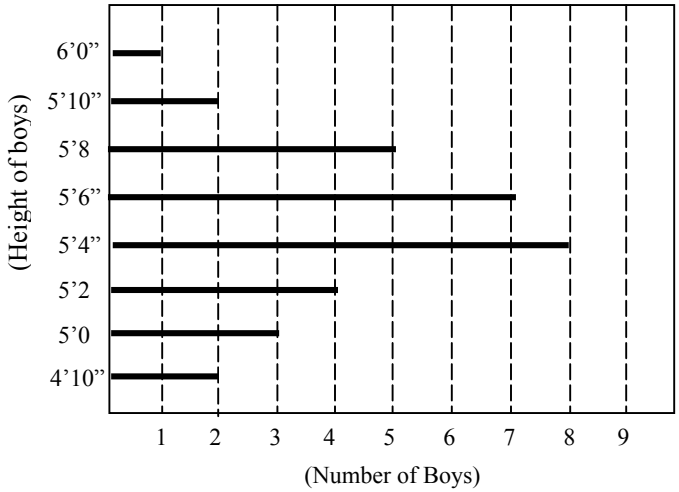
A. 25

B. 17

C. 9

D. 15

E. ?



END OF TEST