

MATH

33 minutes

Directions: Choose the best answer from the four given for each problem.

51. 1.90 written as a fraction is _____?

(A) $1\frac{9}{100}$

(B) $\frac{1}{90}$

(C) $1\frac{1}{10}$

(D) $1\frac{9}{10}$

52. Based on the table, how many more ships did England have than Portugal from 1600–1700?

**Number of Ships Sailing to Asia
from European Countries, 1500–1800**

	1500–99	1600–1700	1701–1800
Portugal	706	371	196
Netherlands	65	1,770	2,950
England	—	811	1,865
France	—	155	1,300

- (J) 440 ships
(K) 1,399 ships
(L) 1,669 ships
(M) Cannot be determined.

53. $\frac{5}{6} \div \frac{11}{12}$ is equal to _____?

(A) $\frac{10}{11}$

(B) $\frac{1}{12}$

(C) $\frac{21}{12}$

(D) $\frac{55}{72}$

54. Which of the following is not a prime number?

(J) 29

(K) 43

(L) 57

(M) 71

55. The least common denominator of $\frac{1}{5}$, $\frac{5}{6}$, and $\frac{1}{3}$ is _____?

(A) 6

(B) 12

(C) 30

(D) 60

56. Amanda uses three rolls of yarn to make one scarf. If she already has four rolls, how many more rolls must she buy in order to make a total of three scarves?

(J) 3

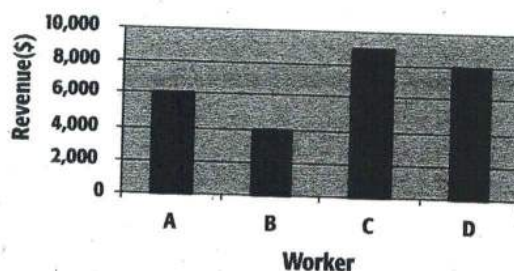
(K) 4

(L) 5

(M) 9

57. Based on the following chart, how much less revenue does worker B earn than worker D?

Revenue per Worker



- (A) \$1,000
(B) \$2,000
(C) \$3,000
(D) \$4,000

58. A bookstore just received a shipment of 126 new books that need to be displayed. If each shelf holds 9 books, how many shelves are needed in order to display all of the books?

(J) 9 shelves
(K) 14 shelves
(L) 16 shelves
(M) 32 shelves

59. $13^2 =$

(A) 26
(B) 52
(C) 166
(D) 169

60. Mary works at a fruit smoothie stand. How much will it cost for a large peach smoothie with calcium and protein supplements?

Smoothie Flavors	Small	Large	Each Supplement \$0.55 Extra
Strawberry-Banana	2.65	3.75	Calcium
Peach	2.85	3.95	Protein
Blueberry	2.75	3.85	Vitamin C

(J) \$3.95
(K) \$4.50
(L) \$4.85
(M) \$5.05

61. What is the greatest common factor of 18 and 24?

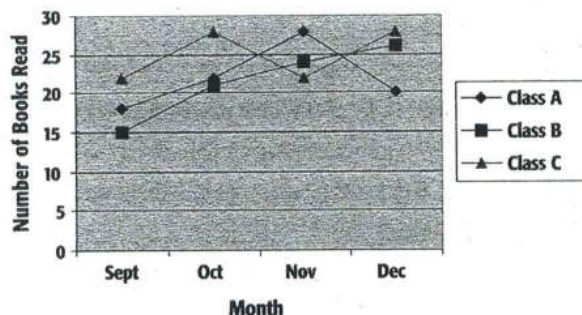
(A) 3
(B) 6
(C) 8
(D) 24

62. What is the decimal equivalent of $\frac{5}{8}$?

(J) 0.58
(K) 0.6
(L) 0.625
(M) 1.6

63. Three different homeroom classes (A, B, and C) kept track of the total amount of outside reading books the students in each class completed each month. What is the only month in which Class B read more books than Class A?

Monthly Totals of Books Read For Each Class



(A) September
(B) October
(C) November
(D) December

64. $15\% =$

(J) $\frac{3}{20}$
(K) $\frac{3}{5}$
(L) $\frac{7}{20}$
(M) $\frac{1}{5}$

65. Anna earns \$40 for babysitting one night. If \$5 of her total is tip, how much did Anna earn per hour if she worked 5 hours?

(A) \$6
(B) \$7
(C) \$8
(D) \$9

66. Brian decided to give his younger brother 30% of his allowance this week for helping him with his chores. If Brian ends up giving his brother \$5.55, how much was his allowance for the week?

(J) \$7.22
(K) \$16.65
(L) \$18.50
(M) \$25.55

67. Mike, Maria, A.J., and Clare divided up their assigned project according to the chart. What fraction of the total project were Maria and A.J. responsible for?

	Portion of Assignment
Mike	0.10
Maria	0.25
A.J.	0.05
Clare	0.60

(A) $\frac{1}{4}$
(B) $\frac{7}{20}$
(C) $\frac{3}{10}$
(D) $\frac{3}{4}$

68. $1 - (-4) =$

(J) -5
(K) 5
(L) -3
(M) 3

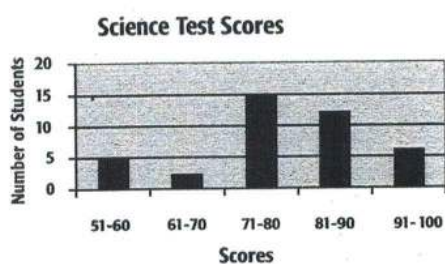
69. Michael wants to bike over to his friend's house. He decides to take a shortcut through the park, which is 346 yards less than if he did not take the shortcut. If the distance from his house to his friend's house is 1,120 yards using the shortcut, what is the distance without using the shortcut?

(A) 774 yards
(B) 1,466 yards
(C) 1,812 yards
(D) 2,586 yards

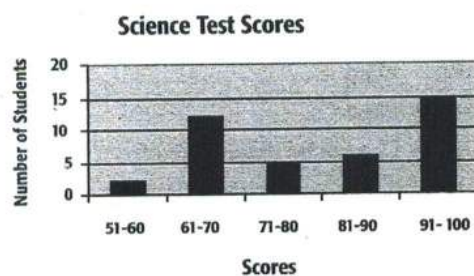
70. The following table shows the scores of 40 students on a science test. Which is a correct histogram of the data?

Scores	Number of Students
51-60	2
61-70	5
71-80	12
81-90	15
91-100	6

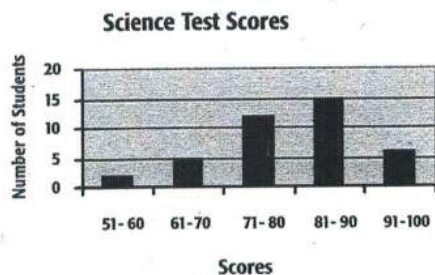
(J)



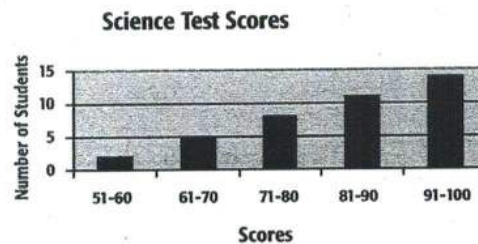
(K)



(L)



(M)



71. 0.000045 written in scientific notation is _____?

- (A) 4.5×10^{-5}
 (B) 4.5×10^5
 (C) 45×10^{-6}
 (D) 4.5×10^{-4}

72. Alexandra bought two books at the bookstore. One book cost \$8.95 and the other was unmarked. If the total price came to \$22.45, how much did the second book cost? (Assume there is no sales tax.)

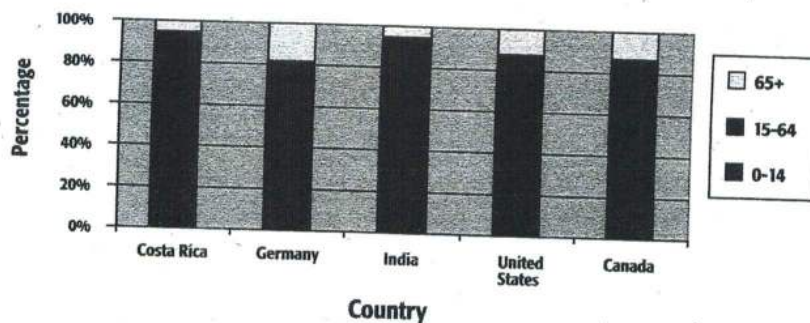
- (J) \$13.50
 (K) \$14.40
 (L) \$14.50
 (M) \$31.40

73. For his science project, Chip decided to test how well plants grew with fertilizer. He started off by planting seeds in three different pots and labeling each of the plants. Plant A had no fertilizer. Plant B had the recommended amount of fertilizer. Plant C had four times the recommended amount of fertilizer. For ten consecutive days, he measured the height of each plant in centimeters. The following table shows his results. Which plant grew the most from Day 7 to Day 9?

Day	1	2	3	4	5	6	7	8	9	10
Plant A (height in cm)	0	1	2	2	3	4	7	9	12	14
Plant B (height in cm)	0	1	2	4	7	10	12	14	15	16
Plant C (height in cm)	0	0	1	1	2	3	4	4	5	5

- (A) Plant A
(B) Plant B
(C) Plant C
(D) Cannot be determined from this data.
74. Jaime always puts $\frac{3}{4}$ of her weekly allowance into her savings account and uses the rest as her spending money. If she earned \$18 this week for her allowance, how much money will be for spending?
- (J) \$4.50
(K) \$6.00
(L) \$3.00
(M) \$13.50
75. The stacked bar graph shows the percentage of people in each age group for five different countries. What two countries have the smallest percentage of their population in the 65+ age group? (Source: CIA World Factbook, 2004)

Age Structure of Various Countries

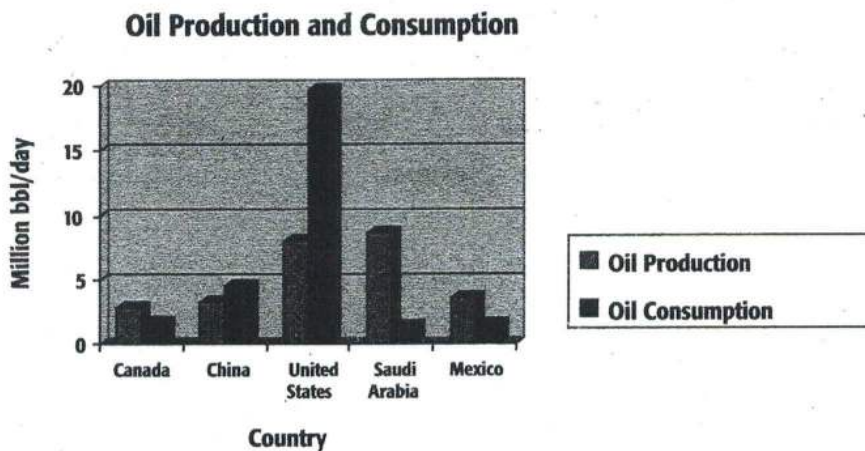


- (A) Germany and Canada
(B) Costa Rica and India
(C) United States and Canada
(D) Costa Rica and United States

76. Joe works at a store which is currently having a sale where every frame is 30% off. A customer wants to purchase a frame that was originally priced at \$24.90. How much is the new sale price?

(J) \$7.47
(K) \$8.30
(L) \$16.60
(M) \$17.43

77. The graph below shows oil production and oil consumption for five different countries. Which two countries consume more than they produce? (Source: CIA World Factbook, 2004)

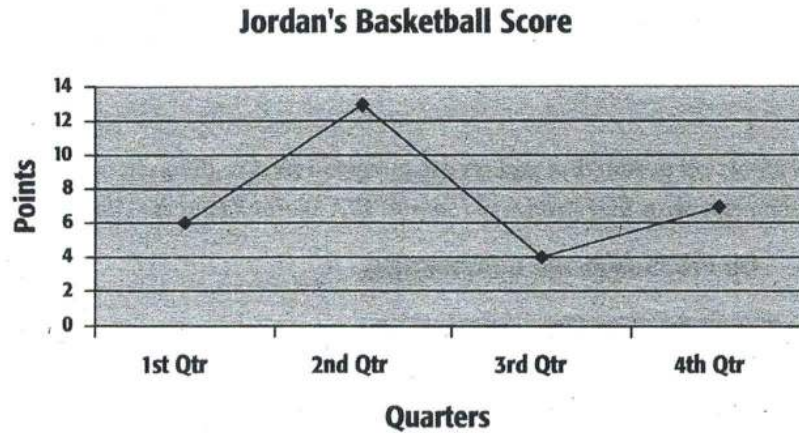


- (A) China and United States
(B) Canada and China
(C) United States and Saudi Arabia
(D) Mexico and Canada

78. If peaches are on sale for \$1.25 per pound, how much will 2.4 pounds cost?

(J) \$2.00
(K) \$2.40
(L) \$3.00
(M) \$3.25

79. Jordan wanted to keep track of how many points he scored during his final basketball game of the season. After each quarter, he recorded how many points he had earned. How many more points did Jordan earn in the second quarter than in the first and third quarters combined?



- (A) 7
(B) 9
(C) 2
(D) 3
80. Based on the following table, what is the total percentage of young children and adults who are allergic to peanuts?

Prevalence of Food Allergies in the United States

Food	Young Children	Adults
Milk	2.5%	0.3%
Egg	1.3%	0.2%
Peanut	0.8%	0.6%
Tree nuts	0.2%	0.5%
Fish	0.1%	0.4%
Shellfish	0.1%	2.0%
Overall	6%	3.7%

- (J) 0.8%
(K) 0.6%
(L) 1.4%
(M) 9.7%

81. Based on the following chart of exchange rates, if Tony had one unit of currency from each country, which is worth the most in U.S. dollars?

Currency	The foreign value equivalent of \$1
Australia	1.2842
Britain	0.5416
India	45.420
Euro	0.7840

- (A) Australia
- (B) Britain
- (C) India
- (D) Euro

82. Martin decided to study for his math test by doing practice problems. If each problem takes him the same amount of time, and he finished 105 problems between the hours of 2 P.M. to 5 P.M., how many problems did he finish per hour?

- (J) 35
- (K) 21
- (L) 52.5
- (M) 33