1. Rachel opened her math book and found that the sum of the facing pages was 243. What pages did she open to?

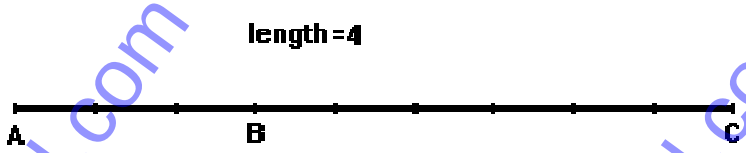
(a) 120 and 121

(b) 121 and 122

(c) 122 and 123

(d) 124 and 125

2. A line of length 4 is divided into nine equal segments. Find a fraction to describe the length AB.




(a) 3/6

(b) 2/5

(c) 4/3

(d) 5/8

3. The record for the greatest number of consecutive jumping jacks is 14500 in 5 hours and 35 minutes. If Joe does 55 jumping jacks per minute, how long will it take Joe to tie the record?

(a) 3 hours 22.35 minutes

(b) 4 hours 23.64 minutes

(c) 3 hours 21.35 minutes

(d) 3 hours 20.35 minutes

4. Two girls went on a vacation together and they agreed to split all expenses. They trip was prepaid so Mary wrote a cheque for food and one for lodging. Clare wrote the cheques for gas and entertainment. How much does Clare owe Mary?

| | FOOD | LODGING |
|---|---|---|
| Mary: | $56.97 | $83.29 |
| | **GAS** | **ENTERTAINMENT** |
| Clare: | $41.96 | $37.47 |

(a)$30.42

(c) $25.26

(b) $35.42

(d) $32.26

5. If a ball is dropped from a height of 100m, each time it hits the ground it bounces 3/5 of the height it fell. How far will the ball have traveled in the 5th bounce?

(a) 322.51 m

(c) 361.12 m

(b) 315.23 m

(d) 351.23 m

6. Nobody knows how old Aunt Helen is but she gave a few hints. She had passed 1/20 of her life before she started school. She spent 3/20 of her life in school; she worked for 1/10 of her life before she got married. She was married for 2/5 of her life. Her husband died after 7/10 of her life. From reading Uncle Harry's gravestone you find out that she has been a widow for 24 years. How old is Aunt Helen?

(a) 80

(c) 90

(b) 75

(d) 102

7. See how many triangles you can draw using any three of the five points on the circle as vertices.

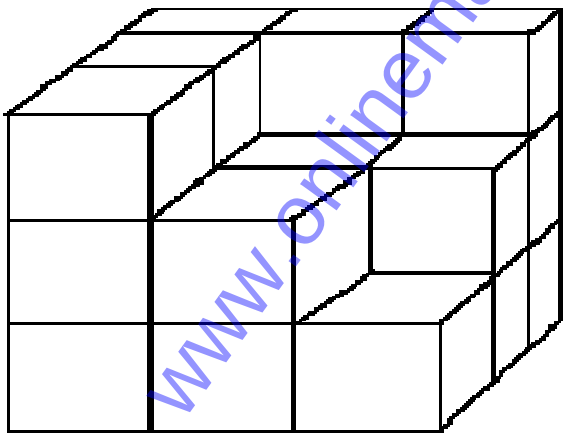
(a) 12

(c) 15

(b) 10

(d) 13

8. How many unit cubes are needed to build this solid figure?



(a) 20

(b) 21

(c) 22

(d) 23

9. A unit fraction is a fraction where the numerator is 1 and so it looks like 1/n. Can you express the fraction 19/72 as the sum of two unit fractions?

(a) 19/72

(b) 22/72

(c) 20/75

(d) 23/72

10. A math student interviewed 50 fifth graders. 41 said they like peanut butter sandwiches, 35 liked jam sandwiches and 30 liked both on their sandwiches. How many students liked neither?

(a) 2

(c) 5

(b) 4

(d) 3

11. In 1989 the price of a soccer ball was $8.00. A financial analyst predicted that the price would rise $0.25/year for the next 10 years. In what year will the price be $9.75?

(a) 1996

(c) 1999

(b) 1998

(d) 2000

12. In how many different ways can the cars of a three car train be arranged?

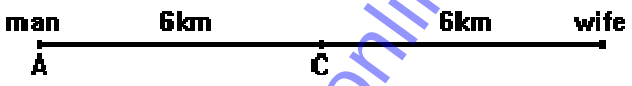
(a) 5

(c) 6

(b) 12

(d) 3

13. If a man can walk 4km in 1 hour and his wife can walk 5km in 1 hour, how many minutes will it take them to meet if they begin walking at the same time at opposite ends of a 12km road, and have agreed to meet at the half way point?




(a) 20 minutes

(b) 50 minutes

(c) 90 minutes

(d) 100 minutes

14. Sixteen players enter a tennis tournament. If there can be no draws how many games must be played if each player can be eliminated by one loss.

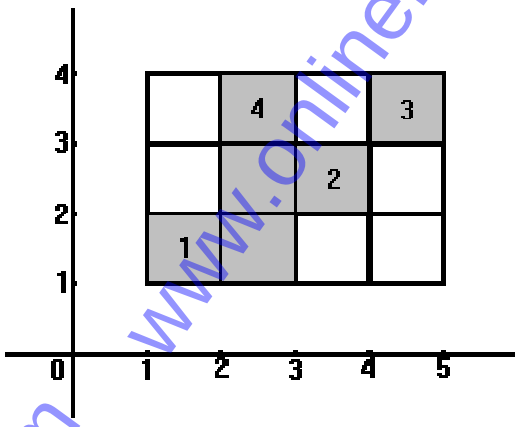
(a) 15

(b) 20

(c) 18

(d) 25

15. Describe the shaded area of the following figure in terms of a fraction.




(a) 1/3

(c) 1/4

(b) 1/2

(d) 1/5

16. Some students hold a bake sale to raise money for their school library. They sold fudge and squares and cookies. One of each type of treat was put into 95 paper bags and the students were allowed to keep the left over. If they started out with 110 cookies, 130 pieces of fudge and 116 squares, the students put the same number of each kind of treat in each bag (eg. 2cookies, 1 fudge, 1 square. How many cookies did they keep?

(a) 12

(c) 14

(b) 13

(d) 15

17. A grocery store has a sale on bananas. If you buy six bananas you get the sale price. If the grocer has 489 bananas how many bunches of six can he sell at his sale price?

(a) 13

(c) 81

(b) 56

(d) 10

18. Two frogs are hopping along a path one lily pad wide, going in the same direction. There are 18 lily pads and one frog jumps 3 lily pads at a time, the other jumps two lily pads at a time. If the frogs leave the shore one after the other, how many lily pads will be jumped on by both frogs?

(a) 1

(c) 8

(b) 3

(d) 2

19. In her first year a dog breeder's dogs produce 2 puppies. In her second year her dogs produce three-times as many puppies. In her third year her dogs produce 5 times as many puppies as the first year. How many puppies will the breeder have produced in her first 3 years?

If she sells the puppies for $200.00 each, how much will she have made?

(a) $3800

(c) $3200

(b) $3600

(d) $3400

20. Four boys work together painting houses for the summer. For each house they paint they get $256.00. If the boys work for 4 months of summer and their expenses are $152.00 per month, how many houses must they paint for each of them to have one thousand dollars at the end of the summer?

(a) 18

(c) 14

(b) 16

(d) 12

21. Place the digits 9, 4, 7, 6, 5, 1, in the boxes in order to get the largest result.

[ ][ ] × [ ][ ] + [ ] × [ ] = ?

(a) 6526

(b) 7224

(c) 2204

(d) 8025

22. An ice cream stand has nine different flavors. A group of children come to the stand and each buys a double scoop cone with two flavors of ice cream. If none of the children choose the same combination of flavors, and every different combination of flavors is chosen, how many children are there?

FLAVOURS

| | |
|---|---|
| 1 | Vanilla |
| 2 | Maple |
| 3 | Chocolate |
| 4 | Tiger |
| 5 | Raspberry |
| 6 | Strawberry |
| 7 | Coffee |
| 8 | Moon Mist |
| 9 | Cherry Vanilla |

(a) 32

(c) 36

(b) 34

(d) 38

23. Convert 18% in to decimal form.

(a) 1.8

(c) 0.18

(b) 0.018

(d) 18

24. One morning grasshopper fell down a hole 2 meters deep. He would climb 1/4 of a meter every day but at night he slid down 1/8 pf a meter. At this rate, how many days until the grasshopper gets out?

(a) 12 days

(b) 13 days

(c) 14 days

(d) 15 days

25. There are 12 people in a room. 6 people are wearing socks and 4 people are wearing shoes, 3 people are wearing both. How many people are in bare feet?

(a) 4

(b) 7

(c) 6

(d) 5

26. A boy secured 88% of the total marks in a public examination. The total marks were 1200. How many marks did the boy secured?

(a) 1056

(b) 1066

(c) 1076

(d) 1086

27. The ratio of the number of kilometer traveled by a car to the number of liter of petrol consumed by it is 9:1. If the car travels 108 km, how much petrol would it consume?

(a) 11 liters

(c) 13 liters

(b) 12 liters

(d) 14 liters

28. The average of three numbers is 21. Two of the numbers are 18 and 20. What is the third number?

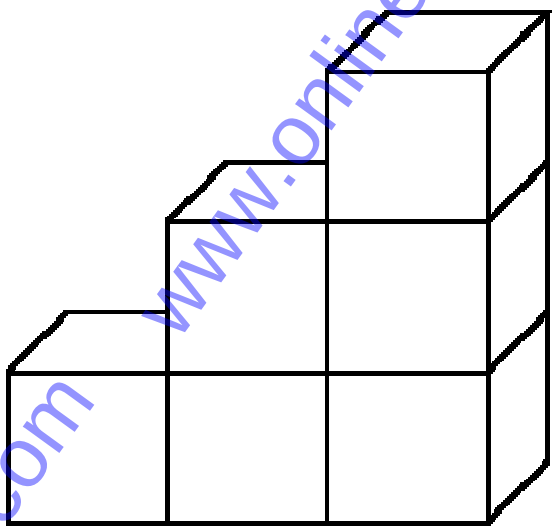
a) 40

(c) 30

(b) 35

(d) 25

29. This stairway is made of cubes. How many cubes would be needed to make the steps 9 steps high?



(a) 45 cubes

(c) 55 cubes

(b) 50 cubes

(d) 60 cubes

30. If you begin with a one digit integer, multiply by 3, add 8, divide by 2 and subtract 6, you will get the integer back.Find the number.

(a) 4

(c) 3

(b) 2

(d) 5

31. A trader bought a pen for $15 and sold it at a profit of 20%. Find the selling price of the pen.

(a) $18

(c) $12

(b) $16

(d) $11

32. The weather during Pith Possum's vacation was strange. It rained on 15 different days, but it never rained for a whole day.

- Rainy mornings were followed by clear afternoons.
- Rainy afternoons were proceeded by clear mornings.
- There were 12 clear mornings and 13 clear afternoons in all
- How long was the vacation?

(a) 20 days

(c) 15 days

(b) 18 days

(d) 14 days

33. If every vertex of a regular pentagon is connected to every other vertex, how many triangles are formed?

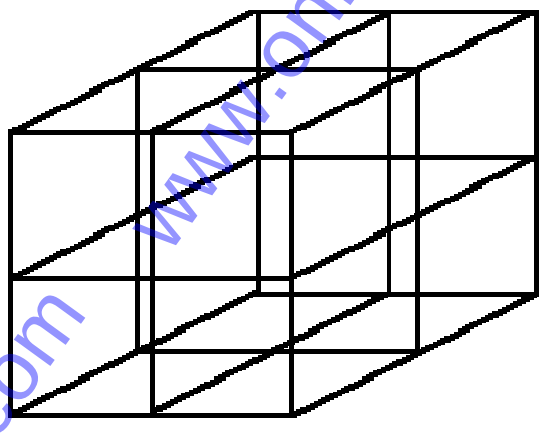
(a) 33 triangles

(c) 35 triangles

(b) 34 triangles

(d) 36 triangles

34. How many different cubes can you make if each face of a given cube has a line connecting the center points of two opposite edges?



(a) 11

(c) 9

(b) 10

(d) 8

35. Kevin borrowed $2000 for 14% simple interest per annum. How much simple interest will he pay after three years?

(a) $840

(c) $860

(b) $850

(d) $870

36. A train covers 720 km in 6 hours. How much time will it take to cover 360 km?

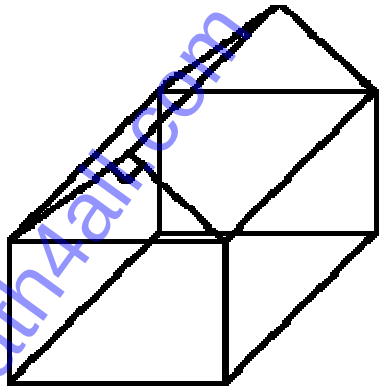
(a) 2 hours

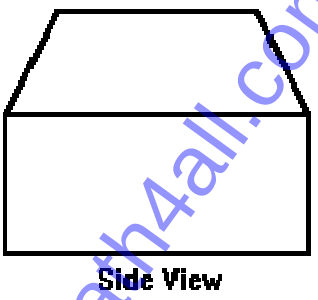
(b) 3 hours

(c) 4 hours

(d) 5 hours

37. Find the number of faces, edges and vertices on the figure shown.






- What would this figure be called?
- What would the two figures contained in it be called?

(a) 17 edges, 9 faces, 10 vertices

(b) 10 edges, 9 faces, 17 vertices

(c) 9 edges, 17 faces, 10 vertices

(d) 17 edges, 10 faces, 9 vertices

38. The mass of the Great Pyramid is 557t greater than that of the Leaning Tower of Pisa. Stone Henge has a mass of 2695t which is 95t less than the Leaning Tower of Pisa. There once was a Greater Pyramid which had a mass twice that of the Great Pyramid, what was the mass of the Greater Pyramid.

(a) 6692t

(c) 6694t

(b) 6693t

(d) 6695t

39. Rachel, Kim and Shawn went to Cuba for a vacation. On the way to Cuba, the plane made the trip in 315 minutes. On the return trip, the flight took 216 minutes. They stayed in Cuba for 3629 minutes. Estimate how long the trip took to the nearest 10.

How long did the trip really take?

(a) 4170, 4160

(c) 4180, 4190

(b) 4250, 4260

(d) 4360, 4340

40. 10 men can do a work in 20 days working 8 hours a day. In how many days can 8 men to do the same work working 10 hours a day?

(a) 50

(c) 30

(b) 40

(d) 20

41. The Riddler has left a clue for Batman to follow at the scene of each crime. These are the clues that Batman has found:

(1) There is a 1 in the thousands place.
(2) The digit in the tens place is 9 times the digit in the thousands place.
(3) Multiply the digit in the thousands place by 2.
(4) The digit in the ones place is a hand without a thumb.
(5) The digit in the hundreds is 2 less than the number in the tens.

Solve the riddle to find the number and help Batman stop the Riddler.

(a) 4794
(c) 9794
(b) 2794
(d) 5794

42. In the first year of production a play sells 1572 tickets, in its second year it sells 1753 tickets, in its third year it sells 152 less than in its second year. How many tickets are sold in 3 years?

(a) 4926
(c) 4928
(b) 4927
(d) 4929

43. Find the number of days from August 15 to October 2 of the same year.

(a) 51

(c) 48

(b) 49

(d) 50

44. A man has to be at work by 9:00 a.m. and it takes him 15 minutes to get dressed, 20 minutes to eat and 35 minutes to walk to work. What time should he get up?

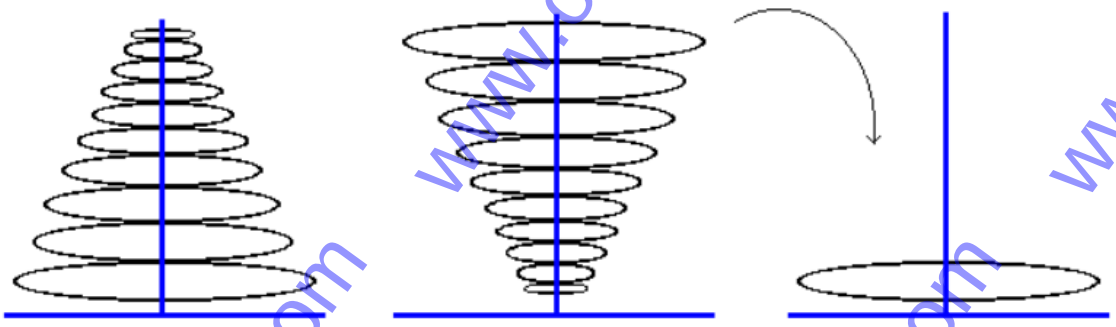
(a) 9: 50 am

(c) 7: 50 am

(b) 8: 50 am

(d) 6: 50 am

45. Batman has been imprisoned by the Riddler. To escape he must find the quickest way to move the tower of plutonium disks from one post to another so that the disks have the same arrangement as on the original post. He may move only one disk at a time. What is the minimum number of moves he must make in order to move the ten disk tower and have it appear the same?



(a) 18

(b) 16

(c) 15

(d) 19

46. According to experts the first 4 moves in a chess game can be played in 197299 totally different ways. If it takes 30 seconds to make one move, how long would it take one player to try every possible set of 4 moves?

(a) 23675880 seconds

(b) 33675880 seconds

(c) 43675880 seconds

(d) 53675880 seconds

47. Divide the face of the clock into three parts with two lines so that the sums of the numbers in the three parts are equal.

(a) 78
(c) 48
(b) 88
(d) 98

48. Divide 6 hours 36 minutes 12 seconds by3.

(a) 12 hrs, 2 min 4 sec
(c) 4 hrs, 12 min 2 sec
(b) 2 hrs, 12 min 4 sec
(d) 2 hrs, 4 min 12 sec

49. A rectangle is of area 56 square cm. If length is 8 cm. what is its width?

(a) 5 cm
(c) 7 cm
(b) 6 cm
(d) 8 cm

50. A number is divided by5. Add 5 to the quotient. The result is 10. What is the number?

(a) 45
(c) 35
(b) 55
(d) 25

Answers:

| | | | | | |
|---|---|---|---|---|---|
| 1. b | 2. c | 3. b | 4. a | 5. c | 6. a |
| 7. b | 8. c | 9. a | 10. b | 11. a | 12.d |
| 13.c | 14. a | 15. b | 16. d | 17. c | 18. b |
| 19. b | 20.a | 21. b | 22. c | 23. c | 24. d |
| 25. d | 26. a | 27. b | 28. d | 29.a | 30. a |
| 31. a | 32. a | 33. c | 34. d | 35. a | 36. b |
| 37. a | 38. c | 39.a | 40. d | 41. b | 42. a |
| 43. c | 44. c | 45. d | 46.a | 47. a | 48. b |
| 49. c | 50. d | | | | |