



Answer the questions

(1)  = 24 locks
 = ?

(2) Caleb buys 1300 liters of oil at a price of \$61100. He finds on reaching his destination that 6% of the oil has leaked out. At what price would he have to sell each liter to make a total profit of 10% ?

(3) Find the missing number.

3	7	19
8	4	17
7	?	11
6	8	15

(4) There are three possible modes of transportation in a state. We can travel by river, by rail, or by road. The state has 2070 km of river, 5220 km of rail, and 11610 km of road. Taking the three ratios (distance covered by the networks of river:rail, rail:road, and river:road), what is the value of the highest consequent?

(5) If  = 21, what is the value of  ?

(6) The table below shows the number of books read by five children in one month.

Name	Number of books
Ryan	?
Ethan	7
Charlotte	10
Eva	12
Sarah	16

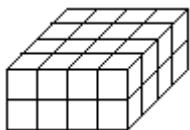
If Ryan read 3 books less than $\frac{1}{3}$ of the total number of books read by the other four children, then

how many books did Ryan read in a month?

(7) Dylan gets paid daily for the work he does and he does not work on Sundays. Last year which was not a leap year had 52 Sundays. He got \$ 246331 as his annual salary last year. If the March of last year had 5 Sundays. How much did he earn in that month?

(8) The parking lot of a mall has a capacity of 700 cars. On Wednesday, the ratio of the empty parking spots to occupied parking spots is 21:29. How many cars were parked there on that day?

- (9) In an exam of Science and Computers, 32% and 40% students failed in Science and Computers respectively. If 7% students failed both in Science and Computers, find the percentage of students who passed in both the exams.
- (10) Following shape is made of several small cubes. What fraction of cubes are not visible in the picture shown below?



- (11) Nur buys 250 bicycle tires, paying \$19.50 for each bicycle tire. She decides to sell each bicycle tire for \$21. How many bicycle tires does she have to sell at this price to completely cover her cost?
- (12) $\square + \square + \square + \square + \square + \square = 600$
 $\square \div \hexagon = 10$
 Find the value of $\square + \hexagon + \hexagon + \hexagon$.
- (13) In a triangle, the first angle is one-third of the third angle and the third angle is 1.5 times the second angle. What is the value of the third angle ?

Choose correct answer(s) from the given choices

- (14) The following table shows the number of candies eaten by Ashley and Ryan in 4 weeks.

Weeks	Ashley	Ryan
1	5	6
2	4	6
3	6	4
4	8	9

Which of the following statements is not true?

- a. In the first two weeks Ashley ate fewer candies than Ryan.
- b. In 4 weeks Ashley ate fewer candies than Ryan.
- c. In the first and last week together Ashley ate more candies than Ryan.
- d. In the last two weeks Ashley ate more candies than Ryan.

Fill in the blanks

- (15) Look at the sequence of numbers and fill in the missing numbers:

2, 2, 4, 12, 48, 240, 1440, _____, _____



Answers

(1) 12 locks

(2) \$55

(3) 11

(4) 129

(5) 15

(6) 12

(7) \$ 20462

(8) 406

(9) 35%

(10) $\frac{9}{32}$

(11) 233

(12) 130

(13) 90°

(14) c. In the first and last week together Ashley ate more candies than Ryan.

(15) 10080 80640