

Benjamin

1) Which is the greatest number ?

- A) $2 + 0 + 0 + 3$ B) $2 \times 0 \times 0 \times 3$ C) $(2 + 0) \times (0 + 3)$
 D) $20 \times 0 \times 3$ E) $(2 \times 0) + (0 \times 3)$

2) Sophie draws kangaroos: a blue one, then a green, then a red, then a black, a blue, a green, a red, a black, and so on...What colour is the 29th kangaroo?

- A) blue B) green C) red D) black E) it's impossible to know

3) How many integers one can find in the interval from 2.09 to 15.3?

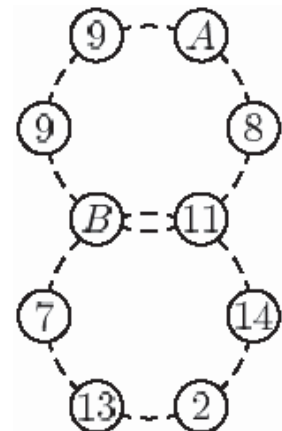
- A) 13 B) 14 C) 11 D) 12 E) infinitely many

4) Which is the smallest positive integer divisible by 2, 3, and 4?

- A) 1 B) 6 C) 12 D) 24 E) 36

5) The sum of the numbers in each of both the rings should be 55. Which number is A?

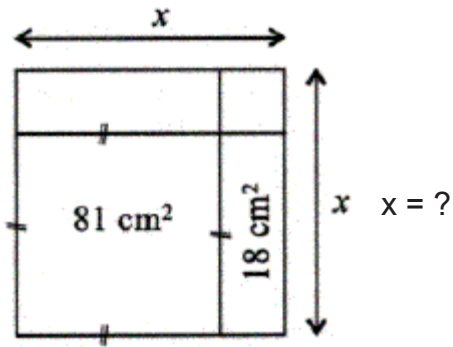
- A) 9 B) 10 C) 13 D) 16 E) 17



6) Tom a 9 billets de cent euros, 9 billets de 10 euros et 10 pièces de 1 euro . Combien a-t-il d'euros ?

- A) 1000 B) 991 C) 9910 D) 9901 D) 99010

7)



A) 9 cm

B) 2 cm

C) 7 cm

D) 11 cm

E) 10 cm

8) Betty likes calculating the sum of the digits that she sees at her digital clock (for instance, if the clock shows 21:17, then Betty gets 11). What is the maximal sum she can get?

A) 24

B) 36

C) 19

D) 25

E) another answer

9) In the picture the distance $AC=10\text{m}$, $BD=15\text{m}$, $AD=22\text{m}$. Find the distance BC .

A) 1m;

B) 2m;

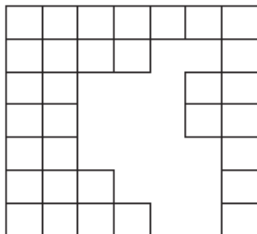
C) 3m;

D) 4m;

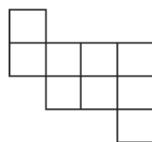
E) 5m



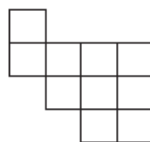
10) Use 2 of these figures to cover exactly the shaded area.



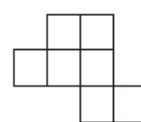
1



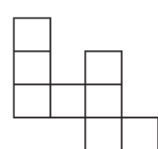
2



3



4



A) 1+3

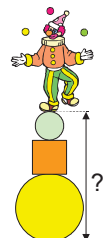
B) 2+4

C) 2+3

D) 1+4

E) 3+4

11) The picture shows the clown Dave dancing at the top of two balls and one cubic box. The radius of the lower ball is 6 dm, the radius of the upper ball is three times less. The side of the cubic box is by 4 dm longer than the radius of the upper ball. In what height above the ground is clown Dave standing?



A) 14 dm

B) 20 dm

C) 22 dm

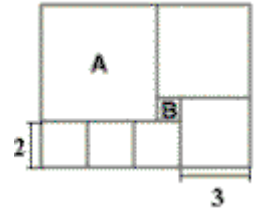
D) 24 dm

E) 28 dm

12) Adding up some two different of the numbers 1, 2, 3, 4, 5 we can obtain

- A) 5; B) 6; C) 7; D) 8; E) 9
different pair-wise sums.

13) The figure, which you can see in the picture, consist of 7 squares. Square A is the biggest one, square B – the smallest one. How many B-squares A-square can be divided into?



- A) 16 B) 25 C) 36
D) 49 E) it is impossible

14)
$$\frac{2003 + 2003 + 2003 + 2003 + 2003}{2003 + 2003} = ?$$

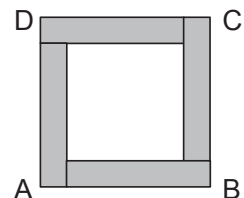
- A) 2003 B) $\frac{1}{3}$ C) 3 D) $\frac{5}{2}$ E) 6009

15) Benito has 20 small balls of different colours: yellow, green, blue and black. 17 of the balls are not green, 5 are black, 12 are not yellow. How many blue balls does Benito have?

- A) 3 B) 4 C) 5 D) 8 E) 15

16) There are 17 trees along the road from Basil's home to a pool. Basil marked some trees with a red strip as follows. On his way to bathe he has marked the first tree, and then each second tree, and on his way back, again, he has marked the first tree, and then each third tree. How many trees have no mark after that?

- A) 4 B) 5 C) 6 D) 7 E) 8



17) Square ABCD is comprised of one inner square (white) and four coloured congruent rectangles. Each coloured rectangle has a perimeter of 40 cm. What is the area of square ABCD?

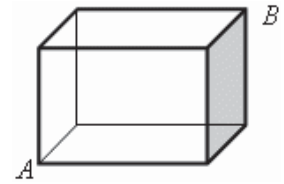
- A) 400 cm² B) 200 cm²
C) 160 cm² D) 100 cm² E) 80 cm²

18) What date will it be exactly 2003 minutes after 20-03-2003 at 20.03

A) 21-03-2003 B) 22-03-2003 C) 23-03-2003 D) 21-04-200 E) 22-04-2003

19) How many shortest ways passing along the edges of the cube from vertex A to opposite vertex B do exist?

- A) 4 B) 6 C) 3 D) 12 E) 16

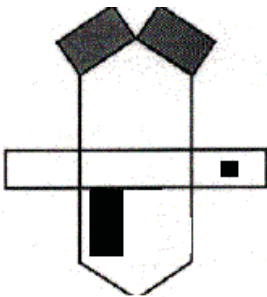


20) A bar-code is formed by 17 black bars and white bars between them (the first and the last bars are black). The black bars are of two types: wide and narrow. The number of white bars is greater by 3 than the number of wide black bars. Then the number of narrow black bars is

- A) 1 B) 2 C) 3 D) 4 E) 5



21) We make a house out of the map. Which house is impossible ?



A)



B)



C)

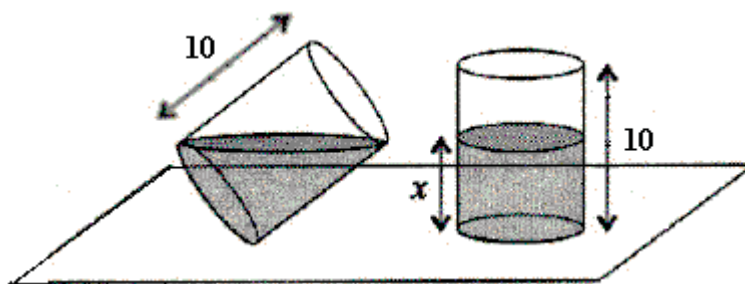


D)



E)

22) A cylinder glass of height 10cm is filled partially with water. You see the glass in two positions. What is the height of the water in the right position?



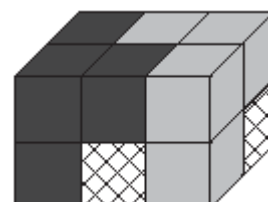
- A) 3cm B) 4cm C) 5cm
D) 6cm E) 7cm

23) Walter decided to display the whole numbers from 0 to 109. Here is part of her numeral chart. Which of the following could not be the part of Walter's chart?

0	2	4	6	8
1	3	5	7	9
10	12	14	16	18
11	13	15	17	19
20	22	24	26	28
⋮	⋮	⋮	⋮	⋮

- A) B) C) D) E)

24) Friedrich has build a rectangular parallelepiped using 3 bricks each consisting of 4 little cubes (see picture). 2 of the bricks you can see in the picture. Which is the third (crosshatched) brick?



- (A) (B) (C) (D) (E)

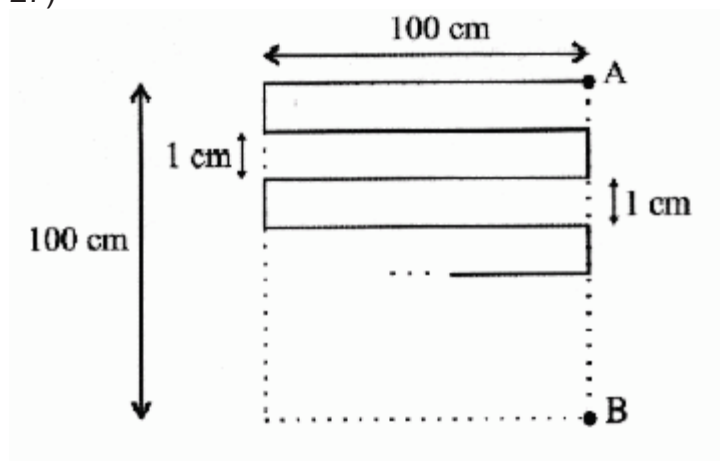
25) You have six sticks of lengths 1 cm, 2 cm, 3 cm, 2001 cm, 2002 cm and 2003 cm. You have to choose three of these sticks and form a triangle. How many different choices of three sticks are there which work?

- A) 1 B) 3 C) 5 D) 6 E) more than 50

26) There were completely red and completely green dragons in the dungeon. Each red dragon had 6 heads, 8 legs and 2 tails. Each green dragon had 8 heads, 6 legs and 4 tails. In all did the dragons have 44 tails. There was also 6 green legs less than the red heads. How many red dragons was the in the dungeon?

- A) 6 B) 7 C) 8 D) 9 E) 10

27)



AB = ?

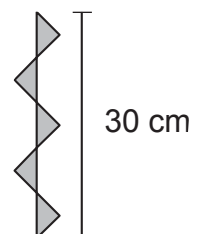
- A) 10200 cm B) 2500 cm C) 909 cm D) 10100 cm E) 9900 cm

28)

$$\begin{array}{r}
 \square \square \square \\
 + \square \square \bigcirc \\
 + \square \triangle \triangle \\
 \hline
 \end{array}
 \quad
 \square + \bigcirc = ?$$

- A) 6 B) 7 C) 8 D) 9 E) 13

29) The figure on the drawing consists of five isosceles right triangles with same size. Find the area of the colored figure.



- A) 20 cm^2 B) 25 cm^2 C) 35 cm^2 D) 45 cm^2 E) cannot be determined

30) Ann has a box of 9 pencils. At least one of them is blue. Among every 4 of the pencils at least two have the same color, and among every 5 of the pencils at most three have the same color. What is the number of blue pencils?

- A) 2 B) 3 C) 4 D) 1 E) impossible to determine