



**THE
AMERICAN
ACADEMY
NICOSIA**
PRIVATE SCHOOL
EST. 1922

The American Academy Nicosia

Sample 4 Entrance Examination

Serial number 202212

Mathematics

Year 7

Time Allowed: 1 hour

Read the below instructions carefully before starting the exam:

- Read all instructions carefully.
- If you cannot answer a particular question, move on to the next one without losing time.
- Use of calculator is not allowed.

Question 1:

Find $\frac{5}{7}$ of 560

Answer:[2]

Question 2:

Calculate $279 + 456$

Answer:[2]

Question 3:

Calculate $416 - 273$

Answer:[2]

Question 4:

Calculate 734×5

Answer:[2]

Question 5:

Calculate $3528 \div 9$

Answer:[2]

Question 6: Find the next two numbers in the these sequences

a) 4, 8, 12, 16,,

b) 37, 31, 25, 19,,

[4]

Question 7:

Calculate

a) $\frac{7}{11} + \frac{3}{11}$

Answer:[1]

b) $\frac{24}{35} \square \frac{7}{36}$

Answer:[2]

c) $\frac{3}{16} \square \frac{9}{8}$

Answer:[2]

Question 8: Convert the following into decimal form:

a) 58 %

Answer:[1]

b) $\frac{7}{20}$

Answer:[1]

c) $\frac{16}{1000}$

Answer:[1]

Question 9:

Sharron took the train from Birmingham at 10:55 and arrived in London at 13:20.

How long was the journey?

Answer:hoursminutes[2]

Question 10:

Find the value of x from the following equation.

$$x - 27 = 58$$

Answer:[2]

Question 11:

Calculate the following:

(a) $23.7 \times 100 =$

(b) $387 \div 100 =$

(c) $10.89 \times 10 =$

[3]

Question 12:

30% of the 150 students in a school are girls. How many boys are in the school?

Answer:[3]

Question 13:

If, $x = 6$, $y = 2$ and $z = 14$ calculate the following:

$$z + y \times x$$

Answer:[3]

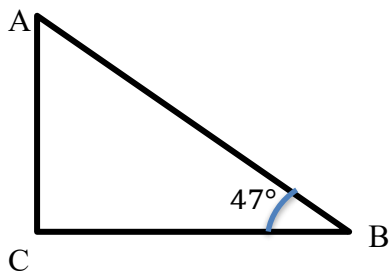
Question 14:

I think of a number, I multiply it by 7 and then I subtract 14. I find 70. What is my number?

Answer:[2]

Question 15:

Below you are given a right-angle triangle. Angle B is 47° . Find the size of angle A.

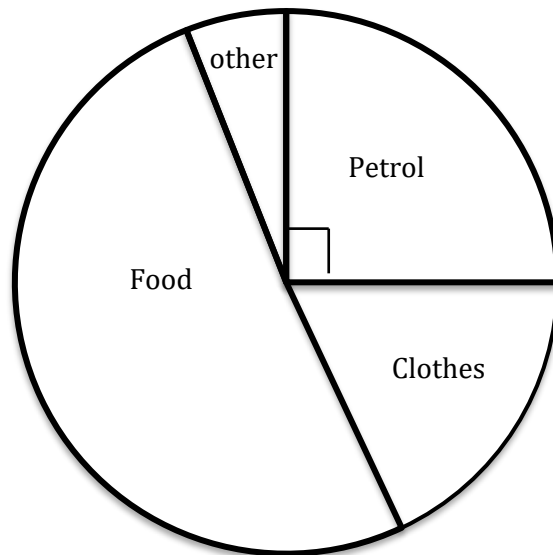


Answer:[3]

Question 16:

Mrs. Yusuf went shopping at a superstore.

The pie chart shows information about the money she spent on petrol, on clothes, on food and on other items.



(a) What did she spend most money on?

(b) What fraction of the money she spent was on petrol?[1]

Mrs. Yusuf spent £25 on petrol at the superstore.[1]

(c) In total, how much money did she spend?

.....[2]

Question 17:

Work out the following

(a) $14 - 3 \times 4 - 2 =$

Answer:[3]

(b) $6^2 - (3 \times 7 - 7) =$

Answer:[4]

(c) $400 \div 100 \times 5 - 2 =$

Answer:[3]

Question 18:

Given the following set of numbers

17, 18, 19, 20, 21, 22, 23, 24, 25

List all

(a) the prime numbers

Answer:[3]

(b) the multiples of 4

Answer:[2]

Question 19:

Sarah went to a sweetshop and bought, 3 chocolate bars costing €1.15 each and 2 packs of wine gums costing 85 cent each.

(a) How much did she pay?

Answer:[3]

(b) How much change does she get from a €20 note?

Answer:[2]

Question 20:

Change 0.36 to a fraction leaving your answer in its simplest form.

Answer: [2]

Question 21:

Jasmine needs 28 minutes to bake a cake. How many cakes can she bake in 2 hours and 20 minutes?

Answer:[3]

Question 22:

The temperature at midnight was said to be 12 °C less than the temperature at midday. At midday it was 7 °C. What was the temperature at midnight?

Answer:[2]

Question 23:

Round the following numbers accordingly:

(a) 3456 (to the nearest hundred)

(b) 931546 (to the nearest thousand)

(c) 9.63 (to the nearest whole number)

[3]

Question 24:

A coat costs €75. The store adds on a discount of 30%. How much is the new sale price of the coat?

Answer:[3]

Question 25:

Put the following numbers in order, starting from the smallest.

20% of 75 5×4 $63 \div 7$ 0.17×100

Answer:[5]

Question 26:

George saves €840 per month. $\frac{2}{7}$ of his savings he saves to buy a car, $\frac{1}{7}$ he saves to buy clothes and the rest he is saving to buy a house.
Calculate the following:

(a) How much money does he save per month to buy a car?

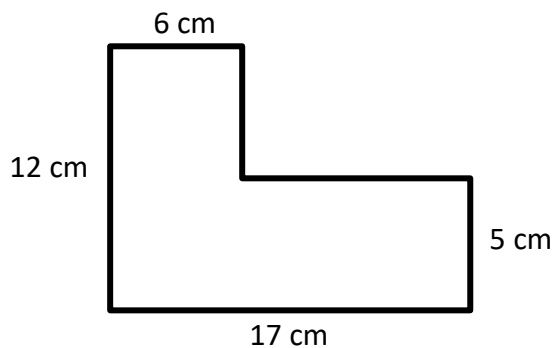
Answer: [2]

(b) How much money does he save per month to buy a house?

Answer: [3]

Question 27:

Find the area and the perimeter of the following shape.

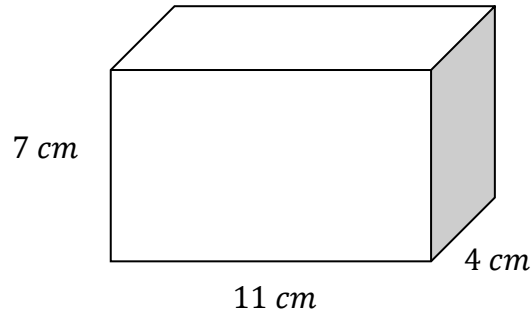


Area: cm^2 [3]

Perimeter: cm [3]

Question 28:

Calculate the volume of this rectangular solid.

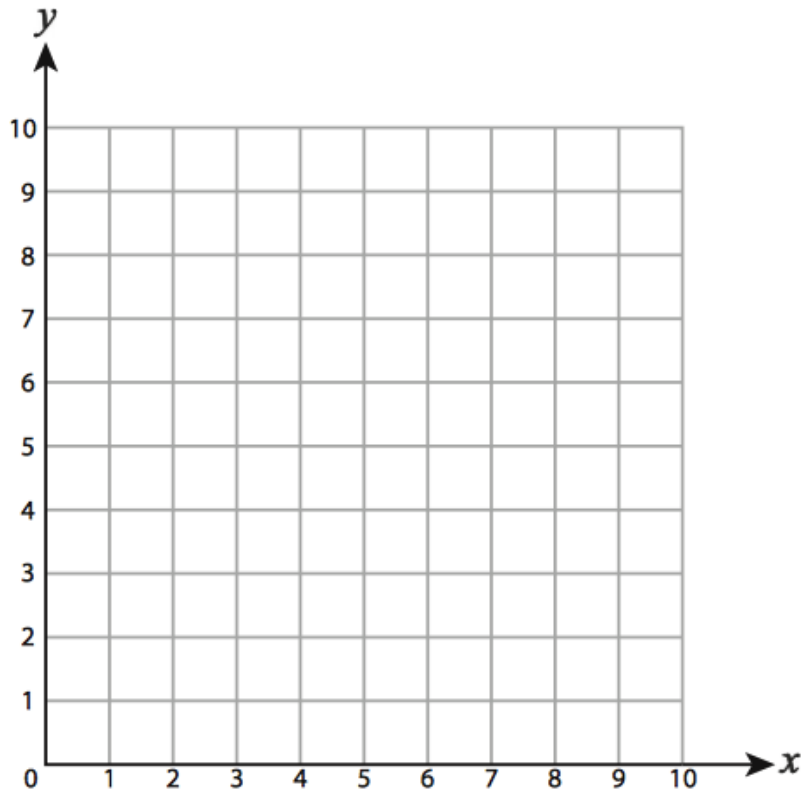


Answer: cm^3 [2]

Question 29:

On the graph below, shade the area that is enclosed by the following points:

A(5, 2), B(4, 5), C(3,0)



[2]

Question 30:

A fair dice is thrown once. Calculate the following probabilities, giving your answer in its simplest form.

(a) 2 is obtained

Answer: [1]

(b) An even number is obtained

Answer: [1]

(c) A square number is obtained

Answer: [1]

END OF PAPER