



EMC 数学检定考试比赛 2019

EDUKIDS MATHEMATIC CONTEST

五年级/ Standard 5

比赛时间：1 小时
Time: 1 hour

注意事项 GENERAL INSTRUCTIONS

1. Do not open the booklet until told to do so by your teacher.
未获监考老师许可之前不可翻开此比赛试卷。
2. This question paper consists of 30 questions. The top 20 questions are multiple choice questions, each with four options. The last 10 questions require answer or proof process.
本试卷共有 30 题。最前 20 题为选择题，每题有四个选项。最后 10 题要写出答案或证明过程。
3. Diagrams are NOT drawn to scale. They are intended only as aids.
题目所提供之图形只是示意图，不一定精准。
4. Neither mathematical tables nor calculators may be used.
不准使用数学表或计算器。
5. Write your answers in the answer boxes on the **separate answer sheet** provided.
答案请另填写在所提供的作答卷的指定位置上。
6. Marks are awarded for correct answers only.
只有正确的答案才能得分。
7. We reserves the right to re-examine students' results before deciding whether to grant official status to their score.
为确保竞赛之公平及公正，主办单位保留要求考生重测之权利。

1-10 题，每题 3 分
Question 1-10, 3 marks will be given for each question

1

970 006

图 1
Diagram 1

图 1 数目写成文字是_____。
The number in words shown in Diagram 1 is _____.

- A 九万七千六
Ninety-seven thousand and six hundred
- B 九十万七万零六
Nine hundred thousand seventy thousand and six
- C 九十七万零六
Nine hundred seventy thousand and six
- D 九十七万六
Nine hundred seventy-six thousand

2 图 2 显示一个青花瓷的年份。
Diagram 2 shows the age of the blue and white porcelain.



图 2
Diagram 2

以年代和年写出这个青花瓷的年份。
Write down the age of the blue and white porcelain in terms of its era and year.

- A 82 个年代
1982s
 - B 8 个年代 2 年
1908s and 2 years
 - C 2 个年代 8 年
1902s and 8 years
 - D 80 个年代 2 年
1980s and 2 years
-

3

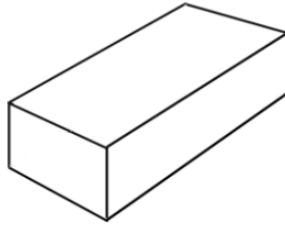


图 3
Diagram 3

图 3 显示一个长方体。长方体的体积是 784 cm^3 ，已知它的长为 14 cm ，请问它的可能高和宽分别是多少 cm ？

Diagram 3 shows a cuboid. The volume of the cuboid is 784 cm^3 . Given that its length is 14 cm , what will its possible height and width be in cm ?

- A 高是 7 cm 宽是 9 cm
Height is 7 cm while width is 9 cm
- B 高是 8 cm 宽是 10 cm
Height is 8 cm while width is 10 cm
- C 高是 7 cm 宽是 8 cm
Height is 7 cm while width is 8 cm
- D 高是 6 cm 宽是 10 cm
Height is 6 cm while width is 10 cm

- 4 图 4 显示一张数目卡。
Diagram 4 shows a number card.

856 032

图 4
Diagram 4

画线的数字的数值是_____。

The value of the digit underlined is _____.

- A 五
Five
- B 五十
Fifty
- C 五千
Five thousand
- D 五万
Fifty thousand

5 $6\,786 + 875 \times 25 =$

- A 21 875
- B 28 661
- C 169 650
- D 191 525

6 把三又二分之一化为百分比。
Convert three and one half to percentage.

- A 312%
- B 320%
- C 321%
- D 350%

7 图 5 显示一个坐标。
Diagram 5 shows a coordinate plane.

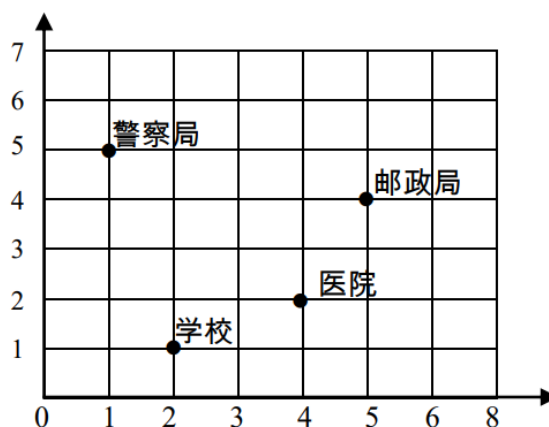


图 5

Diagram 5

以下哪个地点与坐标搭配是不正确的?

Which of the following locations and coordinates are mismatched?

- A (1, 5) 警察局 police station
- B (2, 1) 学校 school
- C (4, 2) 医院 hospital
- D (4, 5) 邮政局 post office

8 数学学会有 30 个会员。科学学会会员与数学学会会员的比是 1: 3。科学学会会员与数学学会会员总共有多少人?

A Mathematics Club has 30 members. The ratio of Science Club to Mathematics Club is 1:3. How many students are there altogether in both the Science Club and Mathematics Club?

- A 40
- B 48
- C 90
- D 120

- 9 图 6 是由一个正方体和一个长方体组成的综合立体。
Diagram 6 shows a combined three-dimensional shape made out of a cube and a cuboid.

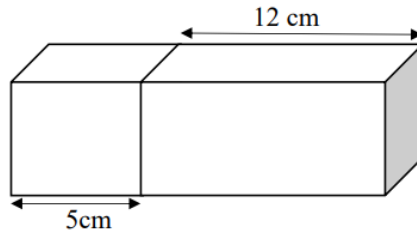


图 6
Diagram 6

计算这个综合立体的体积。
Calculate the volume of this combined shape.

- A 125
B 300
C 375
D 425
-
- 10 万物回收中心在一年里共收到了 94 136 个铝罐。在下半年所收集的铝罐是上半年的 3 倍。万物回收中心在上半年共收集了多少个铝罐？
A recycling centre collected 94 136 aluminium cans in a year. The number of aluminium cans collected in the last half of the year is three times the number of aluminium cans collected in the first half of the year. How many aluminium cans did the recycling centre collect altogether in the first half of the year?
- A 23 534
B 47 068
C 70 602
D 94 136

11-20 题，每题 4 分

Question 11-20, 4 marks are given for each question

- 11 苹果电脑公司从外国进口了 12 972 个滑鼠。在售卖了 y 个滑鼠后，苹果公司还剩下 1 208 个滑鼠。下面哪项算式可用来表示这情况？
Apple Inc. imported 12 972 mice from overseas. After selling y number of mice, the company has 1 208 mice left. Which of the following equations represents the situation?
- A $12\,972 - y = 1\,208$
B $12\,972 + y = 1\,208$
C $1\,208 \times y = 12\,972$
D $12\,972 \div y = 1\,208$

-
- 12 李老板总共订购了 25 罐糖果，一罐糖果有 350 颗。李老板总共订购了多少颗糖果？

Boss Lee ordered 25 jars of sweets. A jar has 350 sweets. How many sweets did Boss Lee order altogether?

- A 375
B 8 650
C 8 750
D 8 950

-
- 13 传单派送员打算把 289 068 张传单分派给 68 个住宅区。平均每个住宅区有超过 4250 间屋子，对吗？请说明。

A flyer delivery man plans to distribute 289 068 leaflets to 68 residential areas. Does each residential area have an average number of 4250 houses? Please specify.

- A 错，因为平均每个住宅有 4 125 间屋子
No, because each residential area has an average number of 4125 houses.
B 对，因为平均每个住宅有 4 251 间屋子
Yes, because each residential area has an average number of 4152 houses.
C 错，因为平均每个住宅有 4 215 间屋子
No, because each residential area has an average number of 4215 houses.
D 对，因为平均每个住宅有 4 521 间屋子
Yes, because each residential area has an average number of 4521 houses.

14 $5\frac{2}{3} - \boxed{} = 2\frac{1}{6}$

哪个分数必须填在空格里？

Which fraction should be filled in the box?

- A $3\frac{1}{2}$
B $4\frac{1}{2}$
C $6\frac{5}{6}$
D $7\frac{5}{6}$

-
- 15 爷爷的年龄是 56 岁。爸爸的年龄是 31 岁。弟弟的年龄是 7 岁。还有多少年他们三人岁数的总和是 100 岁？

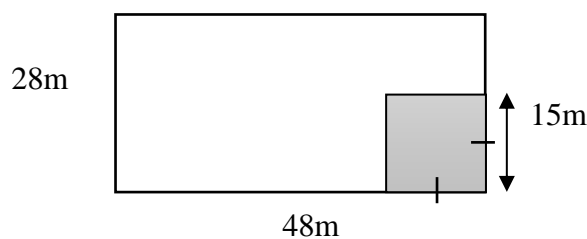
Grandfather is 56 years old; Father is 31 years old, and Younger Brother is 7 years old. How many years later will the sum of their ages be 100 years old?

- A 6
B 5
C 2
D 1
-

-
- 16 一台空调的售价是 RM1 099，安装一台空调的费用是 RM250。一家工厂共买与安装了 25 台空调。这家工厂总共需付多少钱？
The price of an air conditioner is RM 1099 and its installation fee is RM 250 each. A factory bought and installed 25 air conditioners. How much did the factory have to pay altogether?
- A RM1 349
B RM6 250
C RM27 475
D RM33 725
-
- 17 15.5 公斤的绿豆被平分成 25 小包。妈妈和舅母各买了 3 小包的绿豆，她们共买了多少克的绿豆？
15.5 kg of green beans are divided into 25 small bags. Both Mother and Aunt bought 3 small bags of green beans each. How many grams of green beans did they buy altogether?
- A 620 克 grams
B 1 860 克 grams
C 3 720 克 grams
D 7 440 克 grams
-
- 18 陈先生把 RM10 000 存入某银行作为期 2 年的定期存款，年利率是 4%。两年后，陈先生把钱提出来了。陈先生共提取了多少钱？
Mr. Tan deposited RM 10 000 into a bank as fixed deposit for two years. The annual interest rate is 4%. Two years later, Mr. Tan withdrew the money. How much did he withdraw?
- A RM400
B RM800
C RM10 400
D RM10 800
-
- 19 陈老师带领学生去种树，学生正好可以分成 3 组，共有 540 棵树平均每个学生种 15 棵树。每组共有多少名学生？
Teacher Tan led students to plant trees. Students are split exactly into 3 groups. There is a total of 540 trees and each student plants an average number of 15 trees. How many students are there in each group?
- A 12
B 14
C 35
D 108
-

- 20 图 7 显示一块菜园的面积。一个菜农打算在涂色部分饲养家禽。以 m^2 为单位，计算种植蔬菜的土地面积。

Diagram 7 shows the area of a vegetable farm. A farmer plans to rear poultry in the shaded area. Calculate the area used to plant vegetables in m^2 .



48m

图 7

Diagram 7

- A 1 344
B 1 119
C 1 089
D 225

21-30 题，每题 5 分

Question 21-30, 5 marks are given for each question

- 21 把 1, 3, 4, 0, 7 的数字组成一个大过 35080 的数目。

Arrange the digits, 1, 3, 4, 0, 7 to form a number greater than 35080.

- 22 甲和乙的和是 44.44，甲和乙的差是 8.24，甲比丙多 5.1，丙是多少？

The sum of A and B is 44.44 while the difference between A and B is 8.24. A is 5.1 more than C. What is the value of C?

- 23 $45\,789 + y + 118\,828 = 429\,901$

找出未知数 y 的值。

Find the value of unknown y .

- 24 计算以下的分数：
Calculate the following fractions:

$$\frac{4}{5} - \frac{1}{2} + 3\frac{1}{10} =$$

- 25 按规律在括号中填上适当的数：
According to the pattern, fill in the appropriate numbers in the brackets:

9、3、18、4、()、()、72、6。

- 26 图 8 显示一个坐标。
Diagram 8 shows a coordinate plane.

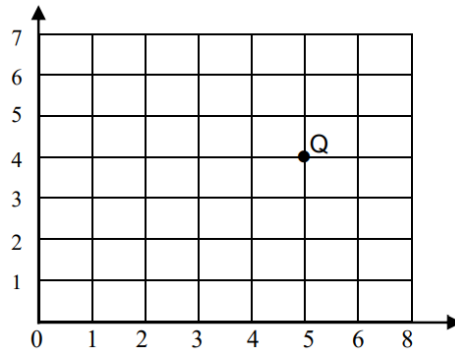


图 8
Diagram 8

在坐标上标上 P 点, R 点和 S 点, 使 PQRS 连接起来时形成一个正方形。
Label point P, point R, and point S on the coordinate plane and connect PQRS to form a square.

P 点必须在 _____, R 点在 _____, 和 S 点在 _____
Point P should be at _____, Point R at _____, and Point S at _____.

27 图 9 显示一个由一个长方形与一个等腰三角形组成的综合图形。

Diagram 9 shows a combined shape formed from a rectangle and an isosceles triangle.

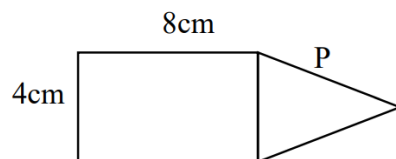


图 9

Diagram 9

全图的周长是 32cm。以 cm 为单位，找出 P 的长度。

The perimeter of the combined shape is 32 cm. Find the length of P in cm.

28 欢乐游乐场的成人门票是 RM42 而 13 岁以下的儿童的门票则是 RM20。陈先生夫妻俩带了三个就读小学的孩子去，他总共需付多少钱的门票？

The price of an adult ticket at a theme park is RM 42 while the price of a ticket for a child below 13 years old is RM 20. A married couple brought three of their children in primary school to the theme park. How much did the father have to pay altogether?

29 甲和乙两个水塔现在有一样的水，甲水塔 1 天出水 135 升，而乙水塔 1 天进水 84 升，请问两个水塔 31 天后相差几升水？

Both Water Tower A and B have the same amount of water now. Water Tower A distributes 135 litres of water per day while Water Tower B distributes 84 litres of water per day. What is the difference between the two water towers after 31 days in litres?

30 有一间正方形的办公室，它的周长是 120 m，请问它的面积会大过 1000 m^2 吗？计算加以证明。

A square-sized office has a perimeter of 120 m. Will its area be greater than 1000 m^2 ? Calculate to prove it.

完

~TAMAT~

END