



EMC 数学检定考试比赛 2019

EDUKIDS MATHEMATIC CONTEST

六年级/ Standard 6

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 are given for each question

1 图 1 显示一个钟面上的时刻。

Diagram 1 shows the time on the clock.

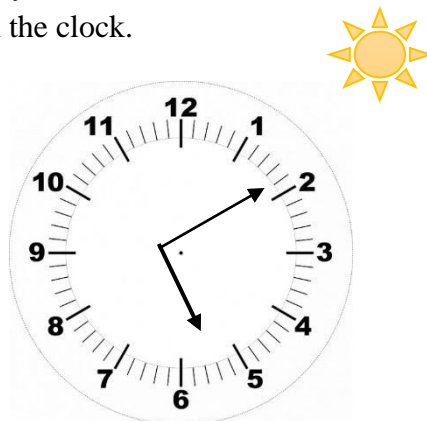


图 1

Diagram 1

以 24 小时制法，以下哪一个是图 1 所示的时刻。

Based on the 24-hour clock system, which of the following indicates the time shown on Diagram 1?

- A 0225 时
- B 0510 时
- C 1425 时
- D 1710 时

2 图 2 显示三个边长 6cm 的正多边形。

Diagram 2 shows three regular polygons with a length of 6 cm.

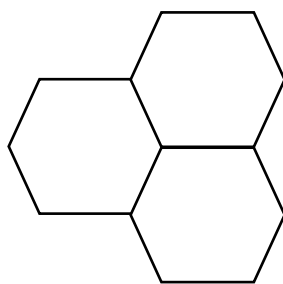


图 2

Diagram 2

图 2 的周长是_____。

The perimeter of Diagram 2 is _____.

- A 60 cm
- B 72 cm
- C 96 cm
- D 108 cm

3 图 3 显示两种水果。

Diagram 3 shows two types of fruits.

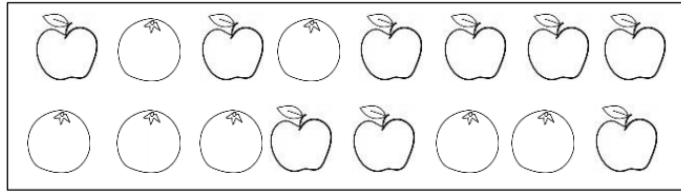


图 3

Diagram 3

苹果与橙的比是_____。

The ratio of apples to oranges is _____.

- A 7:9
- B 9:7
- C 7:16
- D 16:7

4 以下哪一个不是质数?

Which of the following is NOT a prime number?

- A 5
- B 23
- C 34
- D 57

5 图 4 显示一个装有一些棋子的盒子。

Diagram 4 shows a box that contains several chess pieces.

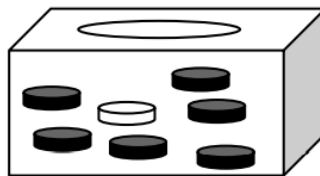


图 4

Diagram 4

以下哪项说明是正确的?

Which of the following statements is correct?

- A 一次抽出白色棋子的可能性小
The possibility of drawing out a white chess piece is low.
- B 两次都抽出黑色棋子的可能性小
The possibility of drawing out a black chess piece is low.
- C 抽出白色棋子和抽出黑色棋子的可能性相同
The possibility of drawing out a white chess piece is the same as the black chess piece.
- D 不可能一次抽出白色棋子
It is impossible to draw out a white chess piece at one go.

6 图 5 显示一个坐标平面图。

Diagram 5 shows a coordinate plane.

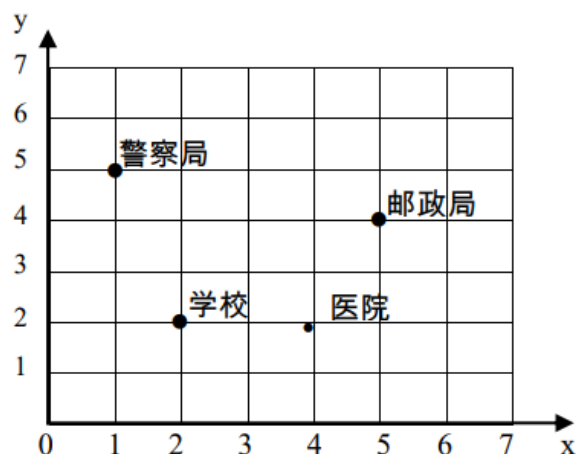


图 5

Diagram 5

从哪个地点到哪个地点的走法是向右走一个格，再向上走两个格？

From which location to which location will the walking method be one box to the right, and then two boxes to the front?

- A 从学校到医院
From school to hospital
- B 从警察局到学校
From police station to school
- C 从医院到邮政局
From hospital to post office
- D 从邮政局到警察局
From post office to police station

7 把 1 125 000 写成百万为单位的分数。

Convert 1 125 000 to the fraction in terms of millions.

- A $1\frac{1}{2}$ 百万 million
- B $1\frac{1}{4}$ 百万 million
- C $1\frac{1}{5}$ 百万 million
- D $1\frac{1}{8}$ 百万 million

8 计算 Calculate $\frac{3}{4} + \frac{1}{5} - \frac{1}{2} =$

A $\frac{9}{20}$

B $\frac{3}{10}$

C $\frac{3}{100}$

D $\frac{1}{4}$

9 计算 Calculate $16.783 + 20.14 - 13.003 =$

A 7.137

B 20.003

C 23.92

D 36.923

10 表 1 显示一家零售商在 2 月份和 3 月份里卖出的铅笔数量。

Table 1 shows the number of pencils sold by a retailer in February and March.

月份 Month	卖出的铅笔数量 (支) Number of pencils sold
2 月份 February	23 799
3 月份 March	19 280

表 1

Table 1

零售商原有 59 789 支铅笔。在三月份之后，他还剩下多少的存货？

The retailer has 59 789 pencils at first. How many pencils are left after March?

A 17 710

B 17 610

C 16 710

D 16 610

11-20 题, 每题 4 分
Question 11-20, 4 marks for each question

11 爱梅有 450 张邮票。其中的 60% 是本地邮票, 其余的是外国邮票。她把外国邮票的其中 65 张送给了朋友。她还剩下多少张外国邮票?
Amy has 450 stamps. 60% is local stamps while the remaining ones are foreign stamps. She gave 65 of her foreign stamps to her friend. How many foreign stamps does she have left?

- A 115
 - B 170
 - C 245
 - D 250
-

12 志华和文强共有 RM92。志华给了文强 RM9 之后, 他所拥有的数额与文强相同。文强原本有多少钱?
Both Zhi Hua and Wen Qiang have RM 92 in total. After Zhi Hua gave RM 9 to Wen Qiang, he has the same amount of money as Wen Qiang now. How much does Wen Qiang have at first?

- A RM37
 - B RM55
 - C RM74
 - D RM83
-

13 明星学校打算在长 30 米的走廊两边放置一盆花。每盆花的间隔距离必须相同, 一共需要放置多少盆花?
SJK (C) Ming Xing plans to place potted flowers at both sides of the 30m corridor. The gap between two potted flowers needs to be exactly the same. How many potted flowers are needed altogether?

- A 15
 - B 17
 - C 19
 - D 22
-

14 中山学校共有 1250 名学生。其他年级的学生比四年级的学生多 4 倍多 50 人。四年级的学生共有多少人?
SJK (C) Chung Shan has 1250 students altogether. The remaining year groups have 4 times and 50 more students than Year 4. How many students are there in Year 4 altogether?

- A 200
 - B 250
 - C 300
 - D 350
-

-
- 15 今年，佳碗的妈妈 45 岁，而佳碗 15 岁。12 年前，妈妈的年龄是佳碗年龄的 11 倍对吗？请说明？
Jia Wan's mother is 45 years old while Jia Wan is 15 years old this year. Was the age of Jia Wan's mother 11 times that of her age 12 years ago?
- A 错，12 年前妈妈 44 岁而佳碗 4 岁，是佳碗年龄的 12 倍
No, Jia Wan's mother was 44 years old while Jia Wan was 4 years old 12 years ago, so it was 12 times that of Jia Wan's age.
- B 对，12 年前佳碗 3 岁，而妈妈 33 岁，刚好是妈妈的 11 倍。
Yes, Jia Wan was 3 years old while her mother was 33 years old 12 years ago, so her mother is exactly 11 times that of her age.
- C 对，12 年前妈妈 33 岁而佳碗 3 岁，刚好是佳碗年龄的 11 倍
Yes, Jia Wan's mother was 33 years old while Jia Wan was 3 years old 12 years ago, so it was exactly 11 times that of Jia Wan's age.
- D 错，12 年前妈妈的年龄是 55 而佳碗年龄是 27 岁，刚好是佳碗年龄的 2 倍
No, Jia Wan's mother was 55 years old while Jia Wan was 27 years old 12 years ago, so it was exactly 2 times that of Jia Wan's age.

-
- 16 意明的储蓄是明浩的 2 倍，小光的储蓄是意明的 3 倍。他们三人的储蓄共 RM23 040。意明的储蓄是多少钱？
Yi Ming's savings are twice that of Ming Hao's. Xiao Guang's savings are 3 times that of Yi Ming's. Their total savings are RM 23 040. What is the amount of Yi Ming's savings?
- A RM2 560
B RM5 120
C RM7 680
D RM10 240

-
- 17 宇哲给了于浩 $\frac{3}{5}$ 的玻璃弹珠后，于浩的玻璃弹珠就有 70 颗。如果于浩之前只有 25 颗玻璃弹珠，宇哲原本有多少颗玻璃弹珠？
After Yu Zhe gave Yu Hao $\frac{3}{5}$ of his marbles, Yu Hao has 70 marbles now. If Yu Hao only had 25 marbles at first, how many marbles did Yu Zhe have at first?
- A 45
B 60
C 75
D 100
-

- 18 中华小学共种植了 165 棵树。男同学所种植的树是女同学的 2 倍多 15 棵。男同学和女同学各种植了多少棵的树?

SJK (C) Chung Hua planted 165 trees altogether. The trees planted by male students are 2 times and 15 trees more than female students. How many trees did the male students and female students plant respectively?

- A 男同学：115，女同学：50
Male students: 115, female students: 50
- B 男同学：50，女同学：115
Male students: 50, female students: 115
- C 男同学：65，女同学：100
Male students: 65, female students: 100
- D 男同学：100，女同学：65
Male students: 100, female students: 65

- 19 一个农场原有 500 只鸡和 200 只鸭。在一场水灾后，共有 100 只鸡和鸭被溺毙了。鸭的数量减少了 12%，剩下多少只鸡?

A farm had 500 chickens and 200 ducks at first. A total of 100 chickens and ducks were drowned after a flood. The number of ducks has reduced by 12%. How many chickens are left?

- A 24
B 75
C 176
D 424

- 20 图 6 显示一个正方体。
Diagram 6 shows a cube.

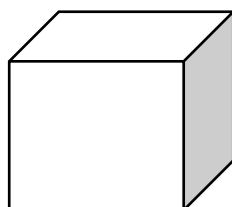


图 6

Diagram 6

这个正方体的表面积是 96 cm^2 。把这个正方体切成两个大小相同的长方体，每个长方体的表面积是多少?

The surface area of this cube is 96 cm^2 . If this cube is cut into half to form two identical cuboids, then what will the surface area of each cuboid be?

- A 16 cm^2
B 48 cm^2
C 64 cm^2
D 128 cm^2

21-30 题, 每题 5 分

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

21 图 7 显示一碗芒果的质量。

Diagram 7 shows the weight of a bowl of mangoes.

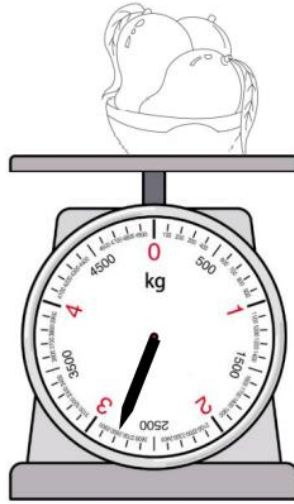


图 7

Diagram 7

如果碗的质量是 100g。平均一个芒果的质量是多少 g?

If the weight of the bowl is 100 g, then what is the average weight of a mango in g?

22 计算 $3.05 \times 78.2 =$

Calculate $3.05 \times 78.2 =$

23 10 小时 35 分钟 + 35 分钟 + 3 小时 31 分钟 = _____ 小时 _____ 分钟。

10 hours 35 minutes + 35 minutes + 3 hours 31 minutes = _____ hours _____ minutes.

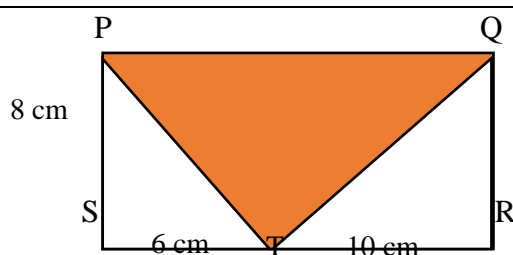
24

$$\boxed{} \times 25\% = 7\frac{1}{3}$$

空格应该填上什么数目?

Which number should be filled in the box?

25



以 cm^2 为单位, 找出阴影部分的面积。

Find the area of the shaded part in cm^2 .

- 26 前往美国的飞机的起飞时刻是 1605 时。从家明的家前往机场需要 55 分钟。国际航班的登机时间是起飞时间的前 1 个小时。以 24 小时计时法写出家明从家里前往机场的时刻。

The departure time of a flight to America is 1605. It will take 55 minutes for Jia Ming to travel from his house to the airport. The boarding time for international flights is 1 hour before taking off. Write down the time when Jia Ming will have to leave his house for the airport using the 24-hour clock system.

- 27 丽芳的 3 次数学考试的平均分数是 65 分。她打算在第四次的数学考试, 把 4 次考试的数学的平均分数提升至 70 分以上。丽芳第四次考试分数可能是多少?
The average mark of Li Fang's three mathematics tests is 65. She plans to increase her average mark to 70 and above during her fourth mathematics test. What is Li Fang's possible mark on the fourth test?

-
- 28 培养学校买了 60 张桌子和 50 张椅子，共付了 RM 4550。一张桌子的售价比椅子多 RM 30。桌子和椅子的单价各是多少？

SJK (C) Pei Yang bought 60 tables and 50 chairs for RM 4550. The price of a table is RM 30 more than the price of a chair. What is the unit price of a table and a chair respectively?

-
- 29 A 仓库和 B 仓库平均可储存 32 500 kg 的粮食。A 仓库的储存量是 B 仓库的 4 倍少 5 000 kg。A 仓库和 B 仓库各能储存多少 kg 的粮食？

Both Warehouse A and Warehouse B can store an average of 32 500 kg of grains. The amount of storage in Warehouse A is 4 times and 5000 kg less than Warehouse B. How many kg of grains can Warehouse A and Warehouse B store respectively?

-
- 30 王老师有 32 个小球。想要刚好平分给一些学生，且每位学生分得超过 2 个，但不超过 20 个，一共有 4 种方法对吗？加以证明。

Teacher Wang has 32 balls. He plans to distribute them to some students equally with each student getting more than 2 balls but not exceeding 20 balls. Are there 4 ways he could go about it? Please justify your answer.

完

~TAMAT~

END