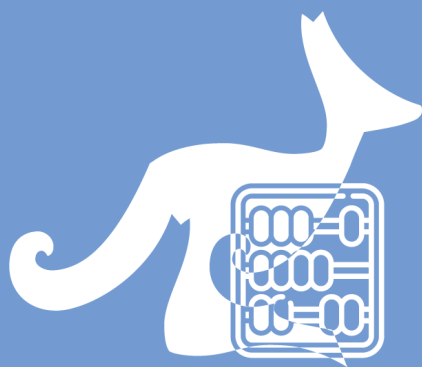




MATH KANGAROO CHINA

考试说明 / Instruction

Time allowed: 75 minutes

考试时长: 75 分钟

Language: English & Chinese

试卷语言: 英文和中文

This is a 24-question multiple-choice competition.

考试包含 24 道单项选择题。

Problems 1 to 8 are worth 3 points each.

1-8 题每题 3 分

Problems 9 to 16 are worth 4 points each.

9-16 题每题 4 分

Problems 17 to 24 are worth 5 points each.

17-24 题每题 5 分

1 point will be deducted for an incorrect answer and no point for a blank answer.

答错扣 1 分, 不答不扣分。

The full score is 120 (Starting point is 24)

总分为 120 分 (起始分数为 24 分)

Do not open this booklet until you are told to do so.

收到监考老师指令后, 方可打开试卷册。

Mark your answers clearly on the answer sheet using a

2B pencil.

务必使用 **2B 铅笔** 在答题卡上正确填涂自己的答案。

Calculator cannot be used during the competition.

考试期间禁止使用计算器。

Good Luck!

预祝考试顺利

**Grade 3
&
Grade 4**

3 points

1. Akira lits 5 identical candles all at the same time. They stopped burning at different times and now look as shown in the picture.

Which candle stopped burning first?

小安将 5 支相同的蜡烛同时点燃。蜡烛在不同的时间停止燃烧，现在

看起来如图所示。

哪支蜡烛最先停止燃烧？



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

2. The 2 kangaroo coins with the question mark on have the same value. What is this value?

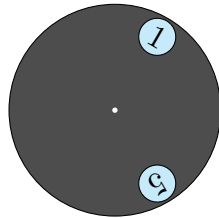
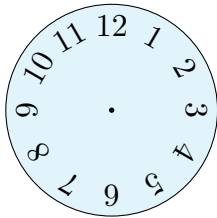
标注问号的两枚袋鼠硬币的面值相同。它们的面值是多少？

$$20 + 10 + 10 + ? + ? + 1 = 51$$

- (A) 1 (B) 2 (C) 5 (D) 10 (E) 20

3. A gray circle with 2 large holes in it is put on top of a clock-face, as shown.

如图所示，将带有两个孔的灰色圆盘放在钟面上。



The gray circle is turned around its center.

Which 2 numbers is it possible to see at the same time?

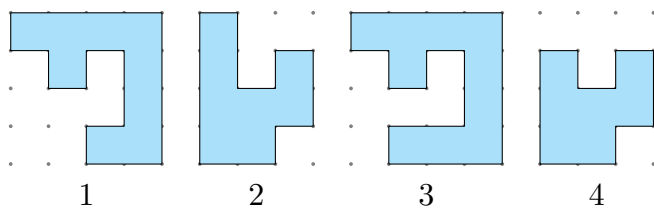
灰色圆盘绕其中心旋转。

哪两个数字可能同时被看到？

- (A) 4 and 9 4 和 9 (B) 5 and 9 5 和 9 (C) 5 and 10 5 和 10
(D) 6 and 9 6 和 9 (E) 7 and 12 7 和 12

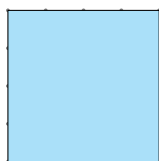
4. Alice has these puzzle pieces:

小艾有以下拼图:



Which 2 pieces can she put together to form this square?

她可以用哪两块拼成下方的正方形?



(A) 1 and 2 1 和 2

(B) 1 and 3 1 和 3

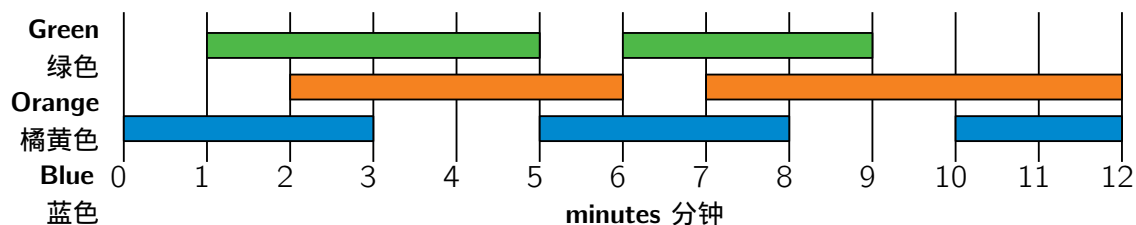
(C) 1 and 4 1 和 4

(D) 2 and 3 2 和 3

(E) 2 and 4 2 和 4

5. A light engineer in the theatre turns the lights on and off. She uses the plan shown. How long in total are exactly 2 of the lights on at the same time?

剧院里的灯光工程师负责灯光的开关, 她的开关计划如下图所示。恰好有 2 盏灯同时亮起的总时长是多少?



(A) 2 minutes 2 分钟

(B) 6 minutes 6 分钟

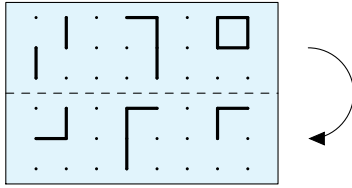
(C) 8 minutes 8 分钟

(D) 9 minutes 9 分钟

(E) 10 minutes 10 分钟

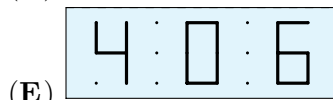
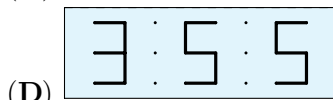
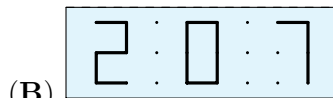
6. Kristoffer folds the transparent paper along the dashed line.

小凯沿着中间虚线折叠透明纸。



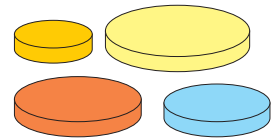
What can he then see?

他能看到什么图案?



7. Anna has 4 discs of different sizes. She wants to build a tower of 3 discs so that every disc is smaller than the disc below it. How many different towers can Anna make?

小娜有 4 张大小不同的圆盘。她想建造一个由 3 张圆盘组成的塔，并且每张圆盘都比紧邻其下方的圆盘小。小娜能建造多少个不同的塔？



(A) 1

(B) 2

(C) 4

(D) 5

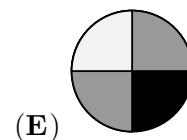
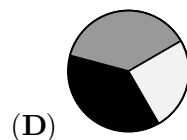
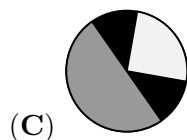
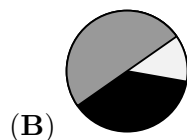
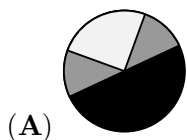
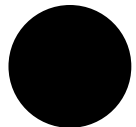
(E) 6

8. Danny glued the 2 pieces of paper on top of the black circle on the right.

小丹把两张纸 粘在右侧黑色圆上。

What can he not obtain?

他无法获得以下哪个图案？



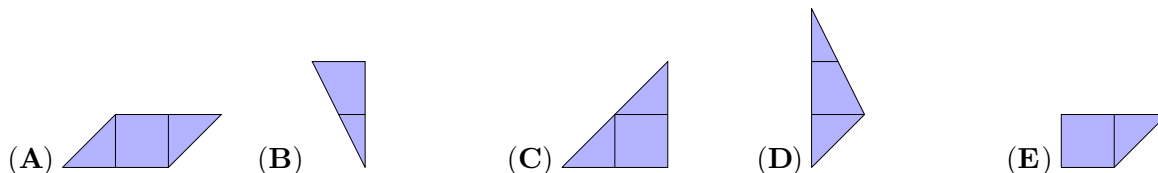
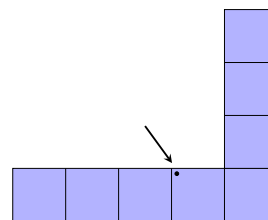
4 points

9. The shape on the right is covered with the 5 pieces below.

Which piece will cover the dot?

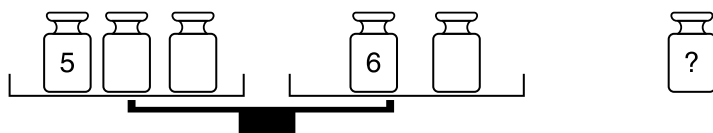
右侧图形正好可以被下方选项中的 5 个碎片覆盖住。

哪个碎片将会覆盖在圆点上面?



10. There are six weights of 1, 2, 3, 4, 5 and 6 kg. Rossitza puts five of them on the scales and puts one weight aside. The scales balance. Which weight did she put aside?

有六个砝码，重量分别为 1、2、3、4、5 和 6 千克。小罗将其中五个砝码放在天平上，还剩一个砝码。天平保持平衡，剩下的砝码重量是多少?



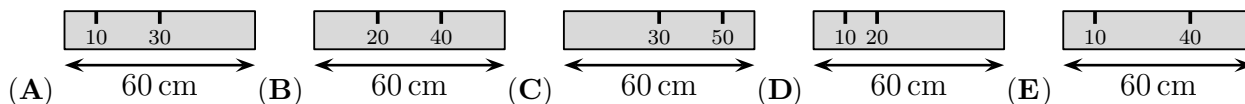
(A) 1 kg 1 千克 (B) 2 kg 2 千克 (C) 3 kg 3 千克 (D) 4 kg 4 千克 (E) can't be sure 无法确定

11. Ali has a 60 cm ruler. Unfortunately, some of the markings have faded away. He is able to measure any of the lengths 10, 20, 30, 40, 50 and 60 cm using his ruler only once.

Which is Ali's ruler?

小力有一把 60 cm 的尺子。但尺子上的一些刻度已经看不清了。每次他只用这把尺子量一回，就可以测出 10、20、30、40、50 和 60 cm 中的任意长度。

以下哪把是小力的尺子?

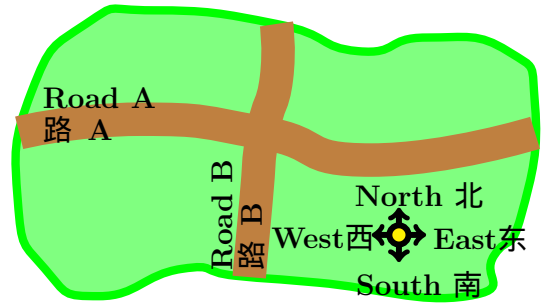


12. There are 7 houses north of Road A, 8 houses east of Road B and 5 houses south of Road A.

How many houses are west of Road B?

路 A 的北面有 7 栋房屋，路 B 的东面有 8 栋房屋，路 A 的南面有 5 栋房屋。路 B 的西面有多少栋房屋？

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



13. There are 8 cars waiting in a queue for the ferry. Every car contains either 2 or 3 people. There are 19 people in total waiting for the ferry. How many cars contain exactly 2 people?

有 8 辆摆渡车在排队等候。每辆车可容纳 2 人或 3 人，一共有 19 人在等待摆渡。有多少辆车恰好只坐了两个人？

- (A) 2 (B) 3 (C) 4 (D) 5 (E) 6

14. The Metro line has 6 stations, A, B, C, D, E, and F.

The train stops at every station.

When it reaches one of the two end stations, it changes its direction.

The train driver started driving at station B and her first stop was station C.

Which station will be her 96th stop?

地铁线路有 6 个车站 A、B、C、D、E 和 F。

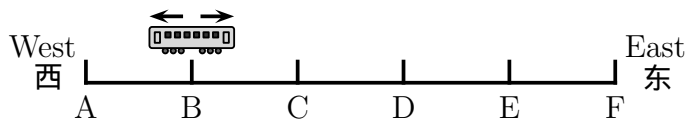
地铁每站都会停。

当地铁到达两端的终点站时，就会改变方向。

地铁司机从 B 站出发，到达的第一站是 C 站。

那么第 96 站是哪一站？

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

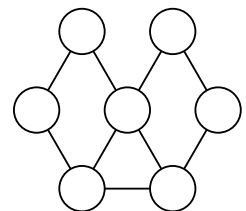


15. Hatice wants to paint the circles in the picture.

She wants to paint any 2 circles connected with a line different colours.

What is the smallest number of colours she needs?

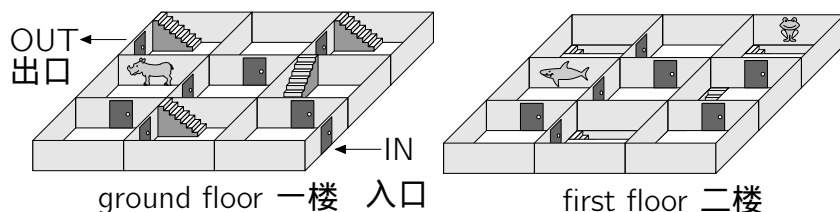
小花想将图中的圆圈全部涂色，同一条线段连接的任意两个圆圈都涂上不同颜色。她最少需要多少种颜色？



- (A) 2 (B) 3 (C) 4
(D) 5 (E) 6

16. Sam walks through the two-storey maze from the entrance to the exit, passing 3 wall stickers. In what order will she see them?

小莎从入口走到出口，会穿过两层楼的迷宫，路过三张贴纸。她会按照什么顺序看到这些贴纸？



- (A) 熊 袋鼠 鱼 (B) 鱼 熊 熊 (C) 熊 鱼 熊 (D) 熊 熊 鱼 (E) 熊 鱼 熊

5 points

17. 6 beavers and 2 kangaroos are standing in a line.



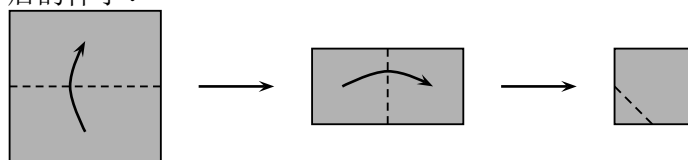
Amongst any 3 consecutively numbered animals, exactly 1 is a kangaroo. Which numbered animal is a kangaroo?

6 只海狸和 2 只袋鼠站成一排。任意 3 个编号连续的动物中，恰好有 1 只是袋鼠。以下哪个编号对应的是袋鼠？

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

18. Rebecca folds a square piece of paper twice. Then she cuts off one corner. Next, she unfolds the paper. What does the paper look like once unfolded?

小瑞将一张正方形纸对折了两次，然后剪掉一个角，最后将这张纸展开。以下哪项是这张纸展开后的样子？



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

19. Hermione, Harry and Ron always walk into the common room one at a time.

Hermione is never first, Harry is never second and Ron is never third.

In how many different orders could they walk in?

赫敏、哈利和罗恩总是按照不同顺序走进公共休息室。

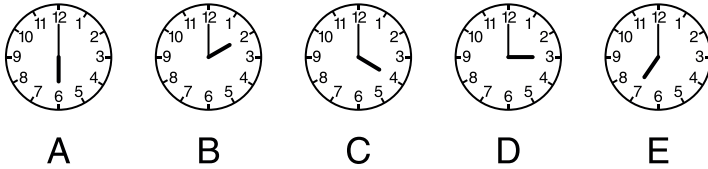
赫敏从来不是第一个，哈利从来不是第二个，罗恩从来不是第三个。

他们可以有多少种不同的顺序进入休息室？

- (A) 1 (B) 2 (C) 3 (D) 4 (E) 6

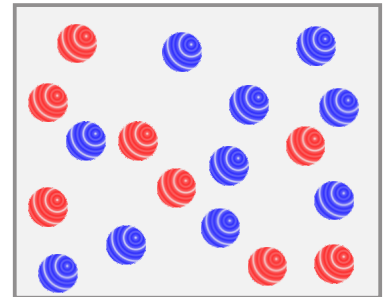
20. There are five clocks on the wall. It is known that one clock is an hour fast, one clock is an hour slow, one clock shows the correct time and two clocks have stopped. Which clock shows the correct time?

墙上挂着五个钟。已知有一个钟走快了一小时，一个钟走慢了一小时，一个钟显示正确的时间，两个时钟已停止工作，以下哪个钟显示的时间是正确的？



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

21. Adam and Brenda have 9 marbles each. Together, they have 8 red and 10 blue marbles. Brenda has twice as many blue marbles as red marbles. How many blue marbles does Adam have?



- (A) 3 (B) 4
(C) 5 (D) 6
(E) 0

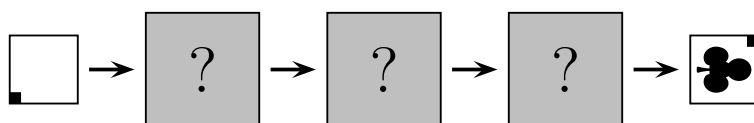
22. Else has two machines. When she puts a square sheet of paper in machine R, it turns the paper 90° clockwise, as shown in the picture. When she puts the paper in machine S, it stamps the paper with a .

小艾有两台机器。如图所示，当她把一张方形纸放进机器 R 时，它会把纸张顺时针旋转 90° ；当把方形纸放进机器 S 时，它会在纸张上打印出图案 .



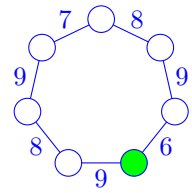
In which order are the machines used to produce the result shown?

要在纸张上最终形成下图所示的图案，使用机器的顺序是什么？



- (A) SRR (B) RSR (C) RSS (D) RRS (E) SRS

23. Teacher Olena wants to write the numbers 1 to 7 in the circles. Inside each circle she writes 1 number. She wants the sum of the numbers in 2 circles that are next to each other to be as shown. What number must she write inside the green/shaded circle?



小欧老师想把数字 1 到 7 写在圆圈里，每个圆圈内写一个数字。她希望相邻圆圈中的数字之和如图所示。她必须在绿色/阴影圆圈内写的数字是多少？

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

24. Maria has shaded exactly 5 cells in a 4×4 grid. She challenges 5 of her friends to guess which cells she has shaded. The grids they have drawn are shown below. Maria looks at them and says: “One of you is right and each of the rest of you has four cells correct.” Which is the correct answer?

小玛在一个 4×4 网格中只给 5 个单元格涂上了阴影。她邀请 5 个朋友猜测涂上阴影的单元格有哪些。5 个朋友绘制的网格如下所示。小玛看着他们说：“你们当中有一个是正确的，其余的每个人都猜对了四个阴影单元格。” 以下哪个网格是正确的？

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