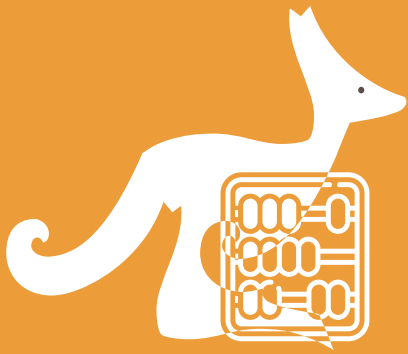




MATH KANGAROO CHINA

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。

DO NOT discuss problems and solutions in any online or public forum until April 30.

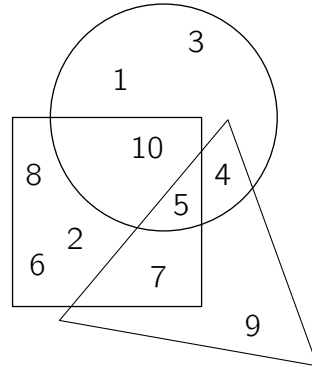
4 月 30 日前请勿以任何形式公开讨论试题和答案。

**Grade 1
&
Grade 2**

3 points

1. Which number is inside the triangle, the square and the circle?

qǐng wèn nǎ ge shù zì tóng shí wèi yú sān jiǎo xíng zhèng fāng xíng hé yuán xíng zhōng
请 问 哪 个 数 字 同 时 位 于 三 角 形、 正 方 形 和 圆 形 中?



(A) 1

(B) 4

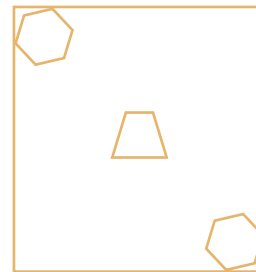
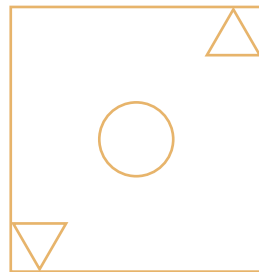
(C) 5

(D) 9

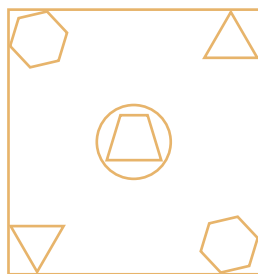
(E) 12

2. Some shapes are printed on 2 pieces of glass. Anna places one on top of the other, without turning either piece. What does she see?

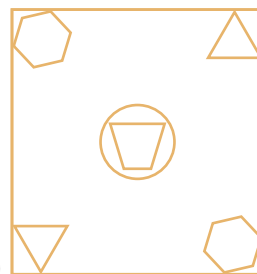
rú tú suǒ shì kuài bō li shàng yìn yǒu yì xiē tú àn xiǎo ān bǎ qí zhōng yí
如 图 所 示, 2 块 玻 璃 上 印 有 一 些 图 案。 小 安 把 其 中 一
kuài bō li fàng zài lìng yí kuài de shàng miàn rú guǒ bù zhuǎn dòng bō li qǐng wèn xiǎo
块 玻 璃 放 在 另 一 块 的 上 面。 如 果 不 转 动 玻 璃, 请 问 小
ān huì kàn dào shén me tú àn
安 会 看 到 什 么 图 案?



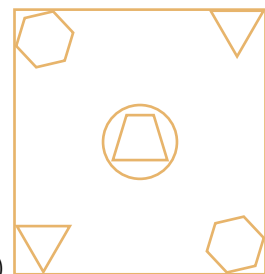
(A)



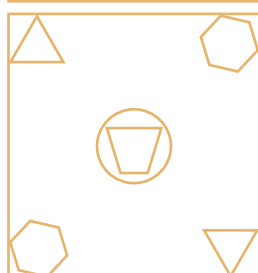
(B)



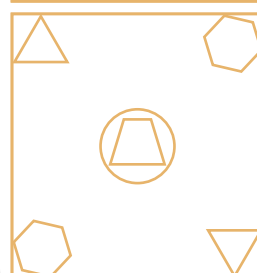
(C)



(D)

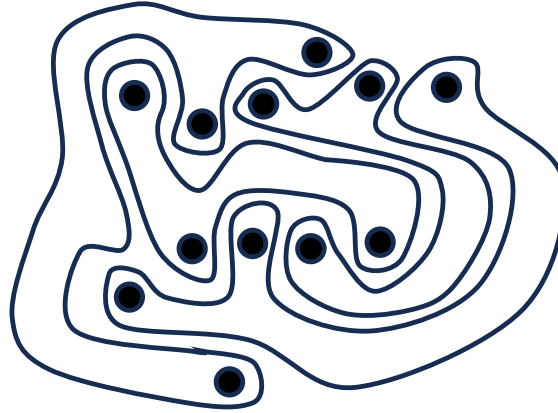


(E)



3. The picture shows 4 strange shapes. How many shapes have 3 dots inside?

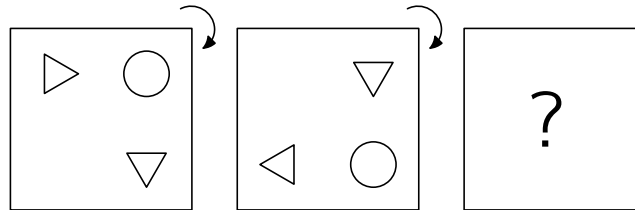
tú zhōng yǒu 4 gè qí guài de tú xíng, qǐng wèn yǒu jǐ gè tú xíng lǐ miàn bāo hán 3 gè diǎn?
图 中 有 4 个 奇 怪 的 图 形, 请 问 有 几 个 图 形 里 面 包 含 3 个 点?



- (A) 0 (B) 1 (C) 2 (D) 3 (E) 4

4. Kevin the kangaroo puts a picture on the table.

dài shǔ xiǎo kǎi bǎ yí fú huà fàng zài zhuō zi shàng
袋 鼠 小 凯 把 一 幅 画 放 在 桌 子 上。



He rotates the picture through a quarter turn, as shown. He then does the same rotation again.

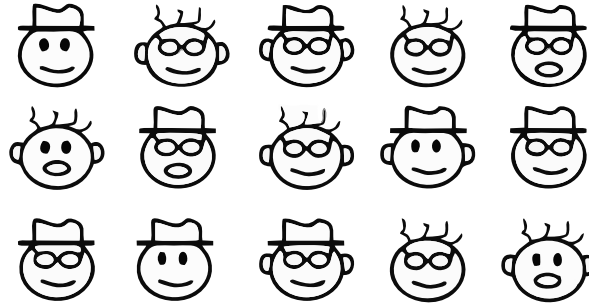
What does Kevin see now?

rú tú suǒ shì, tā jiāng zhè fú huà xuán zhuǎn le sì fēn zhī yī quān. rán hòu tā yòu zuò le yí cì tóng yàng de xuán zhuǎn. qǐng wèn xiǎo kǎi xiàn zài kàn dào de shì xià liè nǎ ge xuǎn xiàng?
如 图 所 示, 他 将 这 幅 画 旋 转 了 四 分 之 一 圈。然 后 他 又 做 了 一 次 同 样 的 旋 转。请 问 小 凯 现 在 看 到 的 是 下 列 哪 个 选 项?

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

5. In the picture, there are 8 different faces.

tú zhōng yǒu zhāng bù tóng de liǎn
图 中 有 8 张 不 同 的 脸。



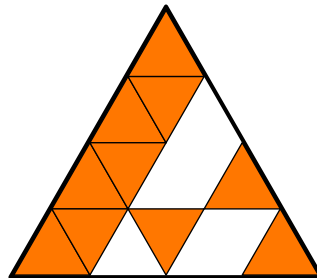
Each face appears twice, except for one. Which face appears only once?

chú le qí zhōng yì zhāng liǎn qí yú de liǎn dōu gè chū xiàn le liǎng cì qǐng wèn
除 了 其 中 一 张 脸, 其 余 的 脸 都 各 出 现 了 两 次。 请 问
nǎ zhāng liǎn zhǐ chū xiàn le yí cì
哪 张 脸 只 出 现 了 一 次?

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

6. Bruno is making this large triangle using identical small triangular tiles.

xiǎo bù zhèng zài yòng xiāng tóng de xiǎo sān jiǎo xíng cí zhuān pīn yí gè dà sān jiǎo xíng
小 布 正 在 用 相 同 的 小 三 角 形 瓷 砖 拼 一 个 大 三 角 形。



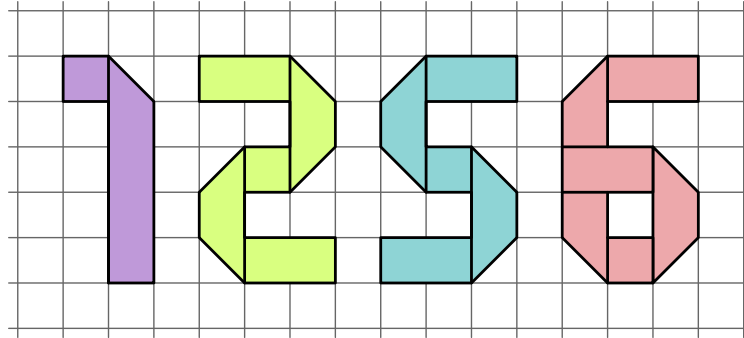
How many more tiles does Bruno need to complete the large triangle?

qǐng wèn xiǎo bù hái xū yào jǐ kuài cí zhuān cái néng pīn chéng zhè gè dà sān jiǎo xíng
请 问 小 布 还 需 要 几 块 瓷 砖 才 能 拼 成 这 个 大 三 角 形?

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

7. Each number below is made using a piece of ribbon.

xià fāng měi gè shù zì dōu shì yòng yì tiáo sī dài zhì zuò ér chéng de
下 方 每 个 数 字 都 是 用 一 条 丝 带 制 作 而 成 的。



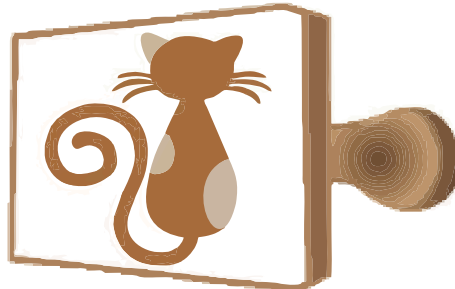
Which piece of ribbon is the longest?

qǐng wèn nǎ tiáo sī dài zuì cháng
请 问 哪 条 丝 带 最 长?

- (A) 1 (B) 2 (C) 5 (D) 6
(E) They are all the same length. tā men de cháng dù dōu yí yàng
它 们 的 长 度 都 一 样。

8. Elena uses the stamp shown to make a picture. Which picture does she make?

xiǎo ài yòng xià tú suǒ shì de yìn zhāng gài zhāng, qǐng wèn nǎ ge shì tā dé dào de
小 艾 用 下 图 所 示 的 印 章 盖 章, 请 问 哪 个 是 她 得 到 的
图 案?

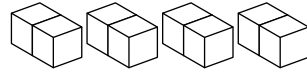


- (A) (B) (C) (D) (E)

4 points

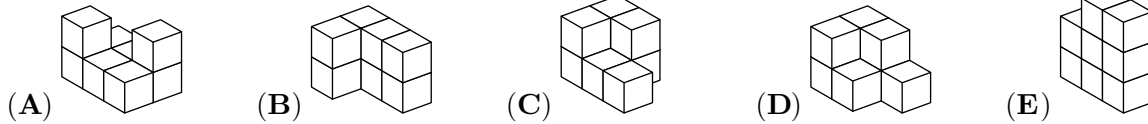
9. A student has 4 blocks, as shown.

如图所 示， 一 名 学 生 有 4 块 积 木。



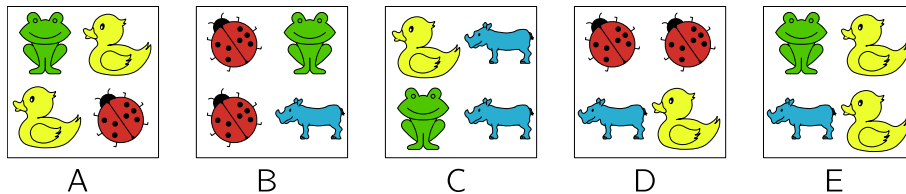
Which of the following shapes cannot be made using these 4 blocks?

请问用这 4 块积木不能搭成下列哪种形状?



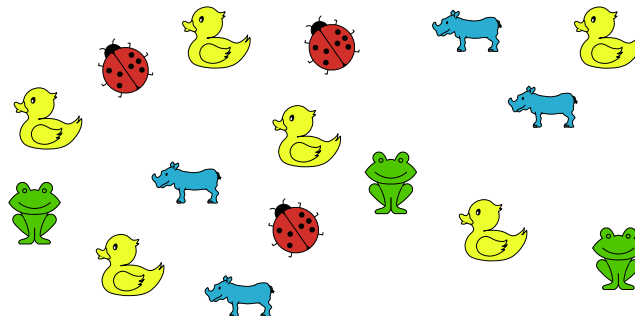
10. Chen has 5 baskets, each containing 4 toys.

小 陈 有 5 个 篮 子， 每 个 篮 子 里 有 4 个 玩 具。



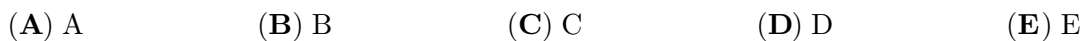
He dropped 4 of the baskets and the toys were mixed up.

他 碰 掉 了 其 中 4 个 篮 子， 里 面 的 玩 具 也 混 在 了 一 起。



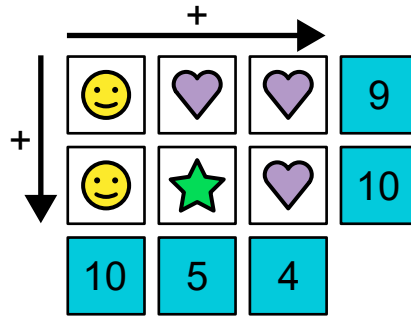
Which basket did he not drop?

请问他没有碰掉哪个篮子?



11. In the following diagram, each shape represents a different value.

xià tú zhōng měi zhǒng tú xíng dài biǎo yí gè bù tóng de shù zì.
下图中, 每种图形代表一个不同的数字。



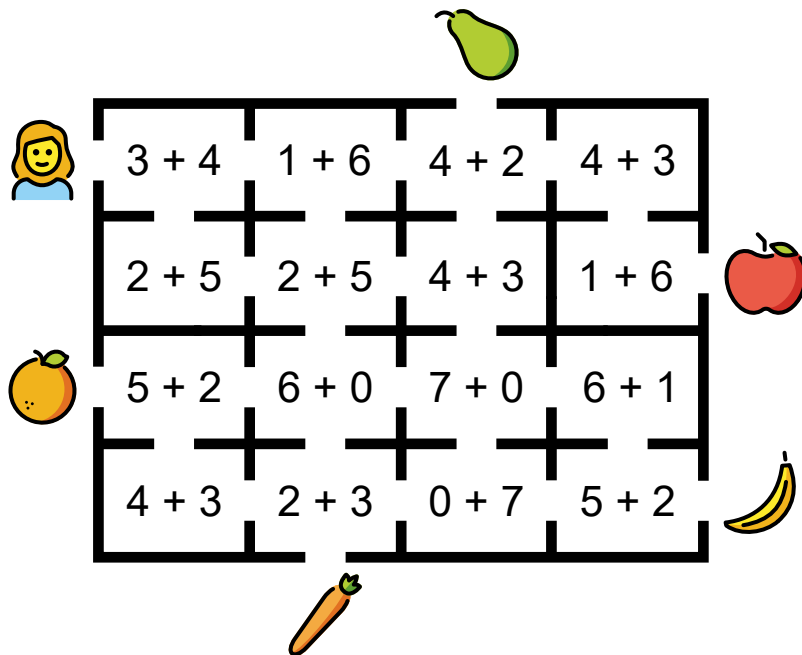
What is the value of ?

qǐng wèn  dài biǎo de shù zì shì jǐ?
请问  代表的数字是几?

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

12. Catrina wants to walk through the maze so that she visits only rooms where the answer to the sum is 7.

xiǎo kǎ xiǎng yào chuān guò mí gōng bìng qiě tā zhǐ néng jīng guò hé wéi de fáng jiān.
小卡想要穿过迷宫, 并且她只能经过和为 7 的房间。



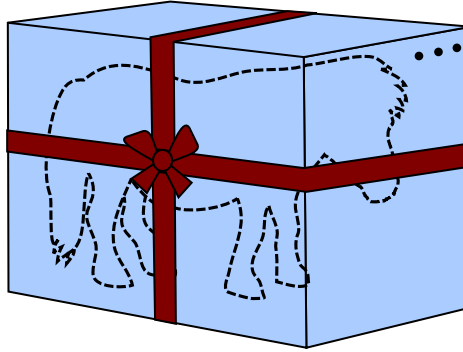
Which object can Catrina reach?

qǐng wèn xiǎo kǎ zuì zhōng kě yǐ huò dé nǎ zhǒng shí wù?
请问小卡最终可以获得哪种食物?

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

13. A toy pony is inside a box that is 1 metre tall, 1 metre wide and 2 metres long.

yì pǐ wán jù xiǎo mǎ zài yí gè gāo 1 mǐ kuān 1 mǐ cháng 2 mǐ de hé zi lǐ.
一匹玩具小马在一个高1米、宽1米、长2米的盒子里。



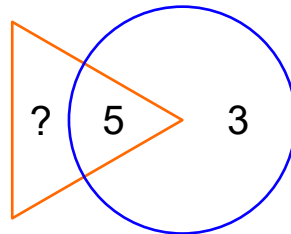
A ribbon goes around the box, as shown. The knot uses an extra 1 metre of ribbon. How long is the ribbon in total?

rú tú suǒ shì hé zi shàng jì zhe yì tiáo sī dài hú dié jié de wèi zhi yòng le 1 mǐ cháng de sī dài qǐng wèn zhè tiáo sī dài de zǒng cháng dù shì duō shǎo
如图所示，盒子上系着一条丝带。蝴蝶结的位置用了1米长的丝带。请问这条丝带的总长度是多少？

- (A) 9 metres 9 米 (B) 11 metres 11 米 (C) 13 metres 13 米
(D) 15 metres 15 米 (E) 17 metres 17 米

14. The sum of the numbers in the triangle should be twice the sum of the numbers in the circle.

sān jiǎo xíng zhōng de shù zì zhī hé shì yuán zhōng shù zì zhī hé de liǎng bèi
三角形中的数字之和是圆中数字之和的两倍。



What number must replace the question mark?

qǐng wèn tú zhōng wèn hào yí dìng kě yǐ yòng nǎ ge shù zì dài tì
请问图中问号一定可以用哪个数字代替？

- (A) 3 (B) 5 (C) 8 (D) 11 (E) 16

15. A line of pictures is made by repeating this pattern of 5 pictures      always in the same order.

xià fāng yì pái tú àn shì jiāng zhè wǔ gè tú àn      àn zhào tóng
下 方 一 排 图 案 是 将 这 五 个 图 案 按 照 同
yàng de shùn xù bù duàn chóng fù pái liè ér chéng de。
样 的 顺 序 不 断 重 复 排 列 而 成 的。



Which picture is in the 27th position in the line?

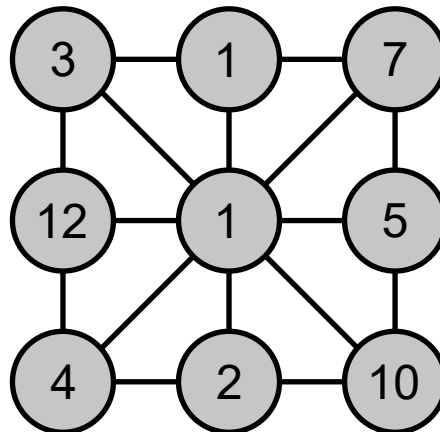
qǐng wèn dì 27 gè tú àn shì shén me
请 问 第 27 个 图 案 是 什 么?

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

16. One of the numbers in the picture is equal to the sum of the numbers connected directly to it.

Which number is this?

tú zhōng yǒu yí gè shù zì děng yú yǔ tā zhí jiē xiāng lián de shù zì zhī hé, qǐng
图 中 有 一 个 数 字 等 于 与 它 直 接 相 连 的 数 字 之 和, 请
wèn shì nǎ yí gè shù zì
问 是 哪 一 个 数 字?

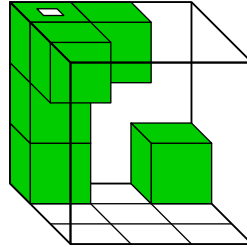


- (A) 3 (B) 5 (C) 7 (D) 10 (E) 12

5 points

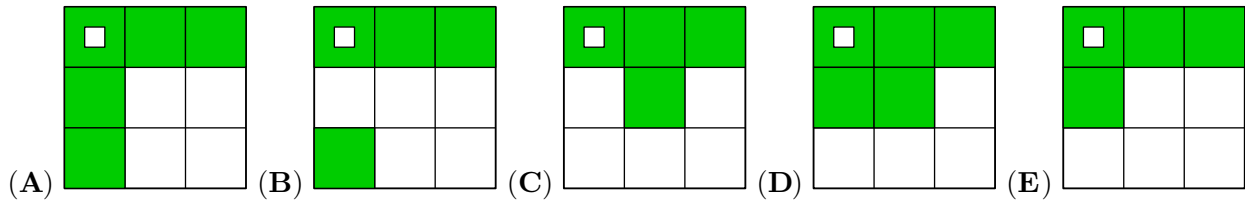
17. Chiara has a transparent box containing 6 small cubes, as shown.

xiǎo qí yǒu yí gè tòu míng de xiāng zi, lǐ miàn bāo hán 6 gè xiǎo lì fāng tǐ,
小奇有一个透明的箱子, 里面包含 6 个小立方体,
rú tú suǒ shì.
如图所示。



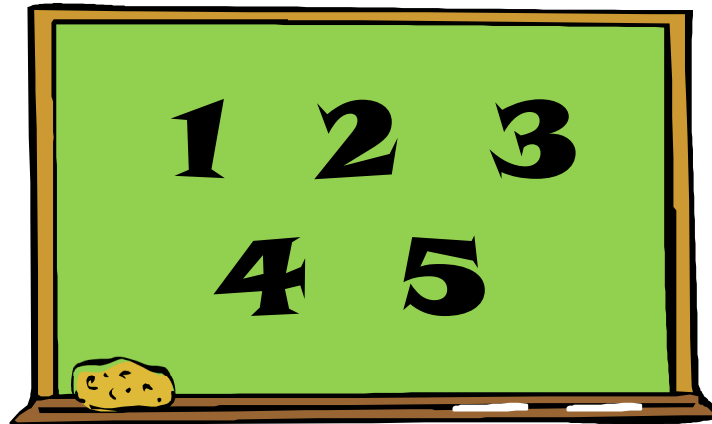
What does Chiara see if she looks at the box from above?

rú guǒ xiǎo qí cóng shàng wǎng xià kàn zhè gè xiāng zi, qǐng wèn tā kàn dào de shì xià
如果小奇从上往下看这个箱子, 请问她看到的是下
liè nǎ zhāng tú?
列哪张图?



18. Esteban wants to pick two numbers from the board and add them together.

xiǎo yī xiǎng cóng hēi bǎn shàng xuǎn chū liǎng gè shù zì bìng xiāng jiā.
小伊想从黑板上选出两个数字并相加。



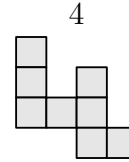
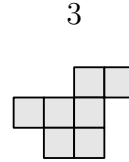
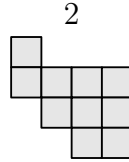
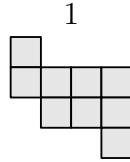
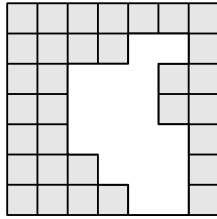
How many different results could Esteban get?

qǐng wèn xiǎo yī kě yǐ dé dào duō shǎo gè bù tóng de jié guǒ
请问小伊可以得到多少个不同的结果?

(A) 5 (B) 6 (C) 7 (D) 8 (E) 10

19. Which two pieces can be used to complete the grid without overlapping?

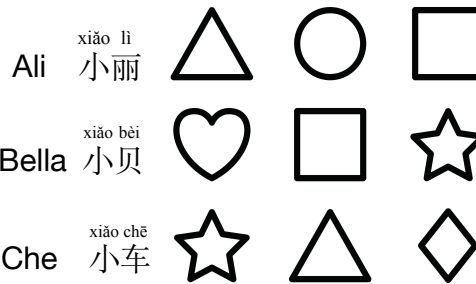
zài bù chóng dié de qíng kuàng xià, qǐng wèn yòng nǎ liǎng kuài tú xíng kě yǐ jiāng zhè gè dà fāng gé bǔ chōng wán zhěng?
在不重叠的情况下, 请问用哪两块图形可以将这个大方格补充完整?



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

20. Ali, Bella, Che and Dimitry each have 3 shapes. Each child has exactly one shape in common with every other child.

xiǎo lì xiǎo bèi xiǎo chē hé xiǎo dí gè yǒu 3 gè tú xíng měi wèi xiǎo péng yǒu dōu qià hǎo yǒu yí gè hé qí tā xiǎo péng yǒu xiāng tóng de tú xíng.
小丽、小贝、小车和小迪各有3个图形, 每位小朋友都恰好有一个和其他小朋友相同的图形。



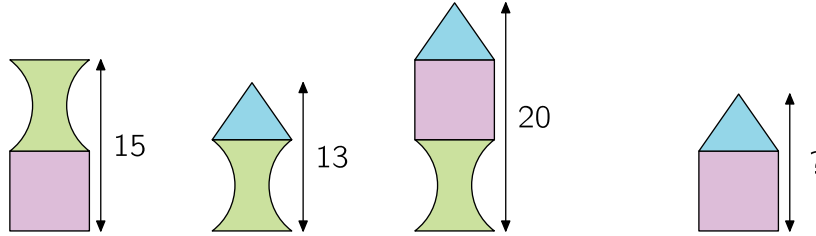
Which shapes does Dimitry have?

qǐng wèn xiǎo dí yǒu nǎ xiē tú xíng?
请问小迪有哪些图形?

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

21. Zoran builds towers from three types of blocks. The heights of three of them are shown in the picture.

xiǎo lán yòng sān zhǒng bù tóng de jī mù dā le jǐ zuò tǎ, qí zhōng sān zuò tǎ de gāo dù rú tú suǒ shì.
小 兰 用 三 种 不 同 的 积 木 搭 了 几 座 塔, 其 中 三 座 塔 的 高 度 如 图 所 示。

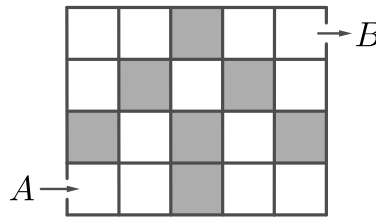


What is the height of the fourth tower?

qǐng wèn dì sì zuò tǎ de gāo dù shì duō shǎo
请 问 第 四 座 塔 的 高 度 是 多 少?

- (A) 12 (B) 13 (C) 14 (D) 16 (E) 17

22. Zara wants to move through the grid from A to B. She can only move to the right or upwards. Each time she visits a grey box, she has to pay 1 euro. Each time she visits a white box, she has to pay 2 euros. How much would she pay for the cheapest path?



xiǎo zhā xiǎngchuān guò fāng gé, cóng A chù zǒu dào B chù. tā zhǐ néng xiàng yòu huò xiàngshàng zǒu měi dāng tā zǒu dào huī sè xiǎo fāng gé shí tā xū yào zhī fù 1 ōu yuán měi dāng tā zǒu dào bái sè xiǎo fāng gé shí tā xū yào zhī fù 2 ōu yuán. qǐng wèn cóng A chù zǒu dào B chù zuì shǎo xū yào huā fèi duō shǎo ōu yuán?
小 扎 想 穿 过 方 格, 从 A 处 走 到 B 处。她 只 能 向 右 或 向 上 走。每 当 她 走 到 灰 色 小 方 格 时, 她 需 要 支 付 1 欧 元。每 当 她 走 到 白 色 小 方 格 时, 她 需 要 支 付 2 欧 元。请 问 从 A 处 走 到 B 处 最 少 需 要 花 费 多 少 欧 元?

- (A) 11 euros 11 欧 元 (B) 12 euros 12 欧 元 (C) 13 euros 13 欧 元
(D) 15 euros 15 欧 元 (E) 16 euros 16 欧 元

23. Julia has a list of problems to finish during May. She starts on the 1st of May.

xiǎo lì wǔ yuè fèn xū yào wán chéng yí tào shì juàn tā cóng wǔ yuè yī rì kāi shǐ zuò tí.
小丽五月份需要完成一套试卷，她从五月一日开始做题。



MAY 2024

Mon	Tue	Wed	Thu	Fri	Sat	Sun
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

If she solves exactly 2 problems each day, she will finish the task on a Sunday. If she solves exactly 3 problems each day, she will finish the task on a Wednesday. How many problems are on the list?

rú guǒ tā měi tiān qià hǎo néng jiě jué 2 dào tí tā jiāng zài mǒu gè xīng qī rì wán chéng zhěng tào shì juàn rú guǒ tā měi tiān qià hǎo néng jiě jué 3 dào tí tā jiāng zài mǒu gè xīng qī sān wán chéng zhěng tào shì juàn qǐng wèn zhè tào shì juàn zhōng yī gòng yǒu duō shǎo dào tí
如果她每天恰好能解决2道题，她将在某个星期日完成整套试卷；如果她每天恰好能解决3道题，她将在某个星期三完成整套试卷。请问这套试卷中一共有多少道题？

- (A) 6 (B) 12 (C) 18 (D) 24 (E) 30

24. Andrew was throwing darts at a target. He started with 10 darts and got 2 new darts each time he hit the target. In total, Andrew threw 20 darts and then had no darts left. How many times did Andrew hit the target?

xiǎo ān zhèng zài cháo zhe bǎ xīn tóu zhì fēi biāo yì kāi shǐ tā yǒu 10 gè fēi biāo měi cì jī zhòng bǎ xīn hòu tā dōu huì huò dé 2 gè xīn fēi biāo xiǎo ān yī gòng tóu zhì le 20 gè fēi biāo bìng qiě zuì hòu méi yǒu shèng xià fēi biāo qǐng wèn xiǎo ān yī gòng jī zhòng le duō shǎo cì bǎ xīn
小安正在朝着靶心投掷飞镖。一开始他有10个飞镖，每次击中靶心后他都会获得2个新飞镖。小安一共投掷了20个飞镖，并且最后没有剩下飞镖。请问小安一共击中了多少次靶心？

- (A) 4 (B) 5 (C) 6 (D) 8 (E) 10