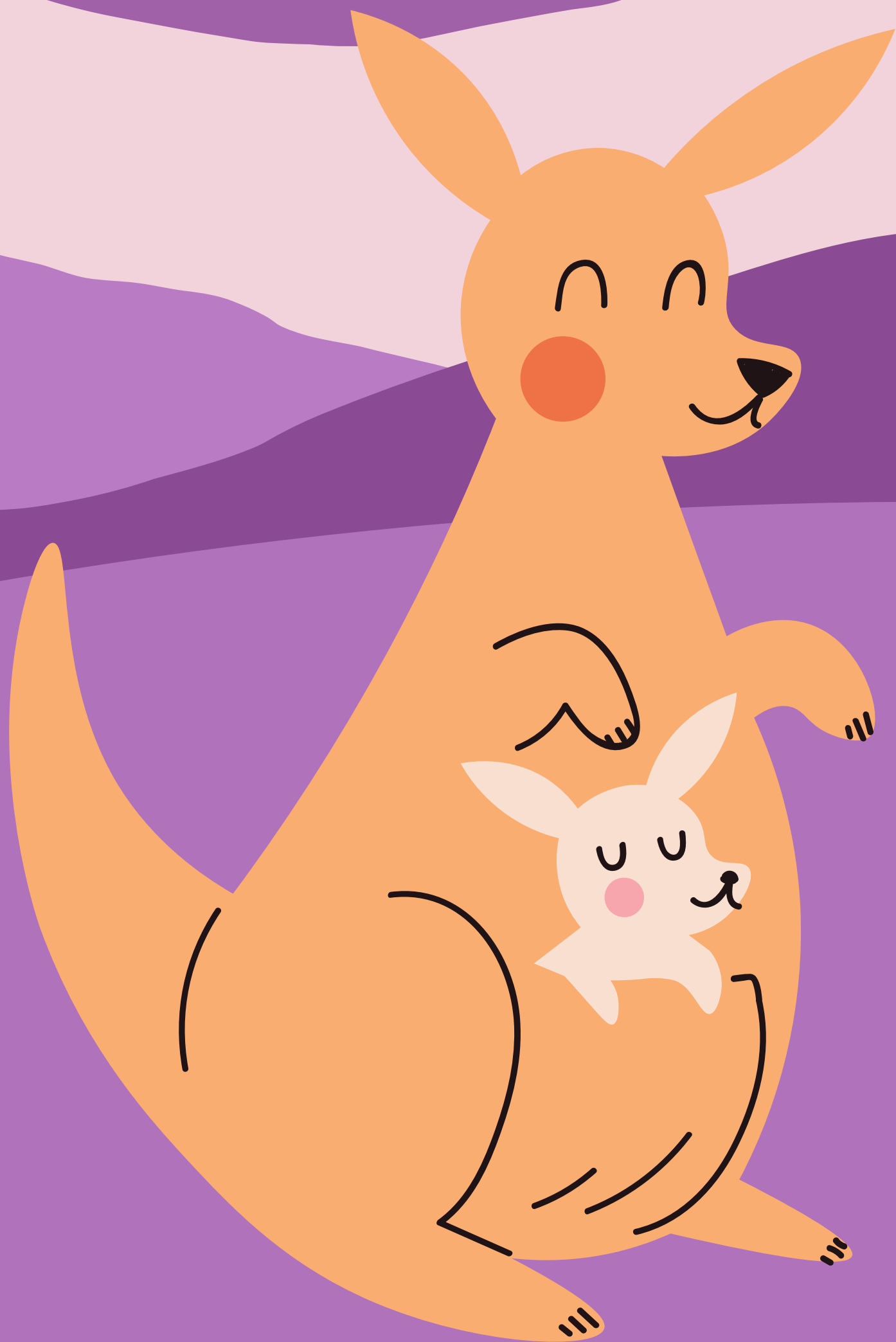


MK 5-POINTERS WORKBOOK

LV3-4

Logical Reasoning

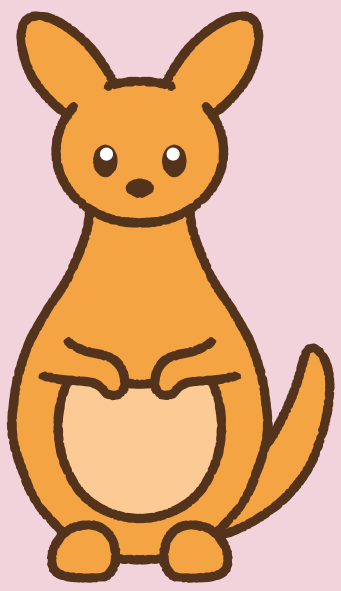


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WeChat

WhatsApp

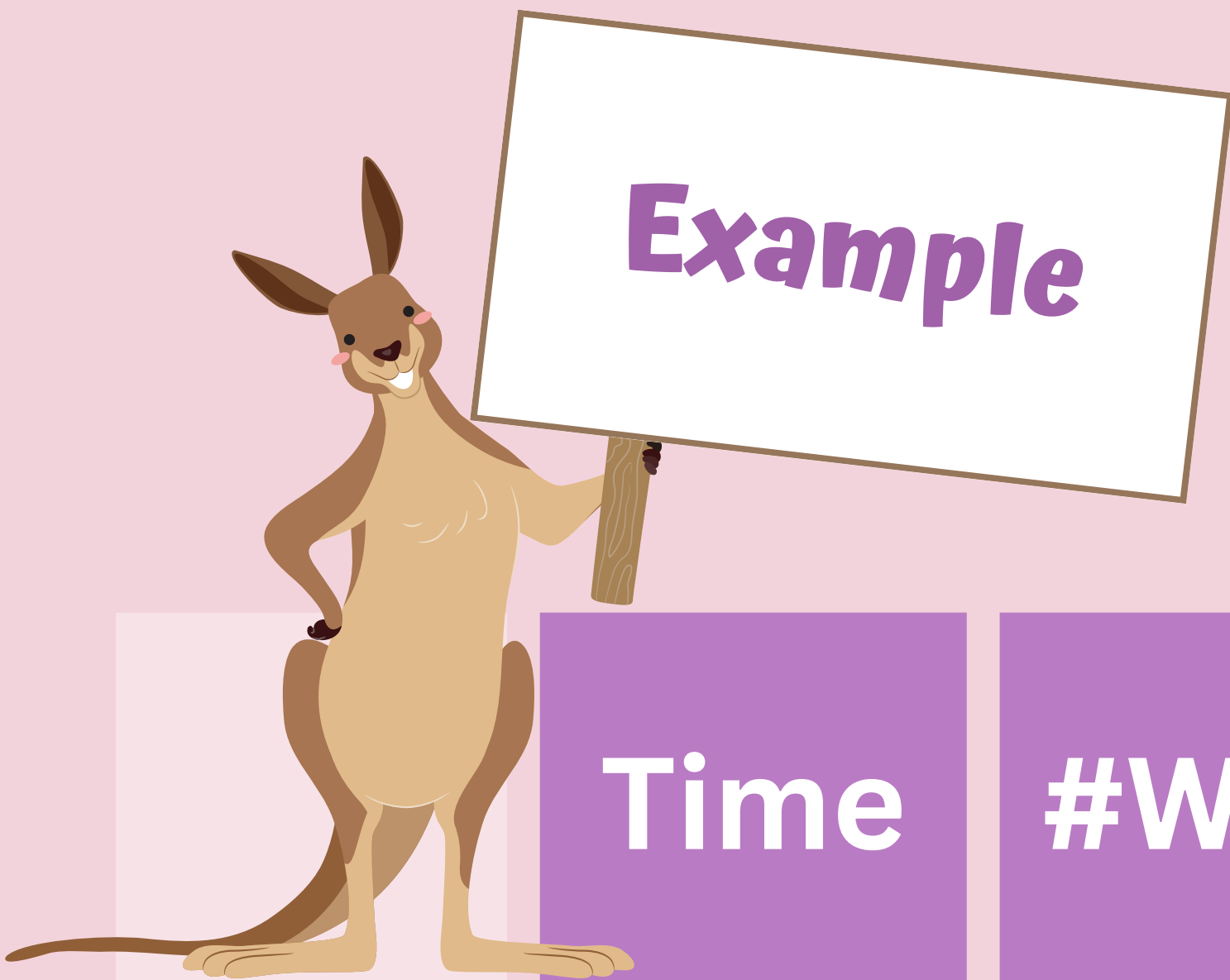


WORKBOOK GUIDELINE



In the following week, you can use this workbook to understand this module better. If you make a mistake, please review your class notes or watch the playback!

- Each week will cover one topic
- Record your time and accuracy on the tracker
- Use stickers or stamps to record your progress



WEEK 0

	Time	#Wrong	Difficulty ★ ★ ★
Mon	30 min	2	★ ★ ★

Logical Reasoning

WEEK 1



Time

#Wrong

Difficulty



Mon

Tue

Wed

Thu

Fri

Picture Reasoning

Day 1

1. Six people each order one cupcake. They order 2 mint-chocolate, 3 chocolate, and 1 cream. They top the cupcakes with 1 cherry, 2 marshmallows, and 3 chocolate chips. They use one topping on each cake, and no two same cakes have the same toppings. Which of the combinations is not possible?



- A. Mint-chocolate with a chocolate chip
- C. Chocolate with a chocolate chip
- E. Mint-chocolate with a marshmallow

- B. Chocolate with a cherry
- D. Cream with a cherry

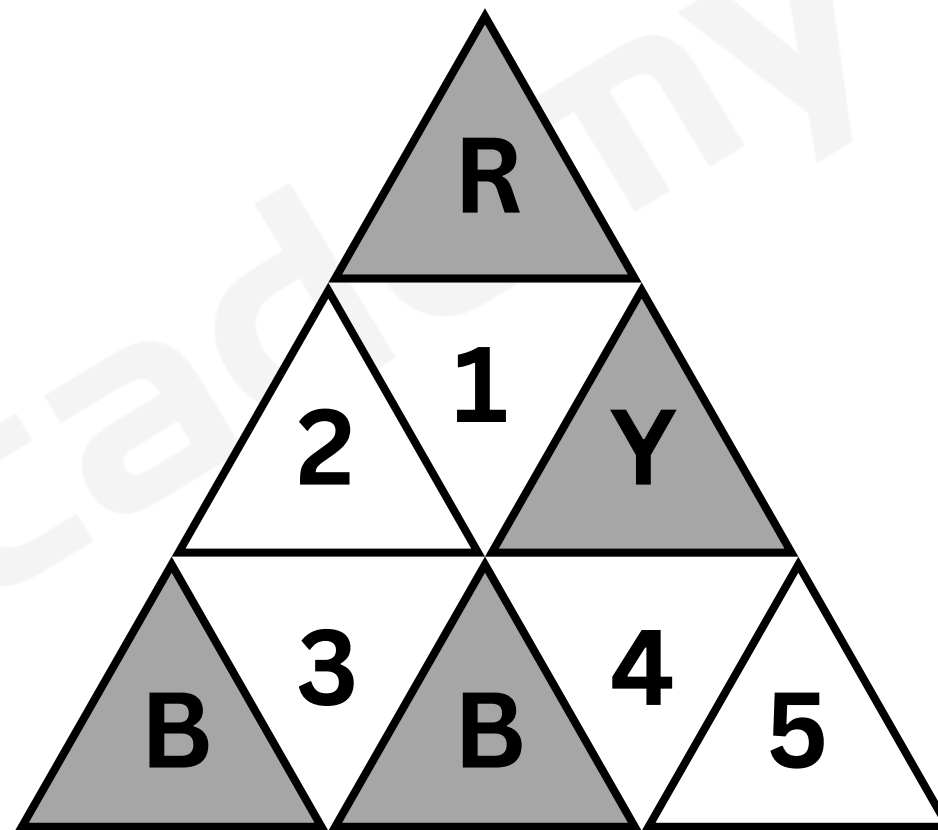
2. Seven people each order one scoop of ice cream. They order 4 scoops of vanilla, 2 scoops of chocolate, and 1 scoop of lemon. They top the ice creams with 3 marshmallows, 2 cherries, 1 waffle and 1 chocolate chip. They use one topping on each scoop, and no two ice cream desserts are the same. Which of the following combinations is not possible?



- A. Vanilla with a chocolate chip
- C. Chocolate with a marshmallow
- E. Lemon with a cherry

- B. Chocolate with a cherry
- D. Vanilla with a waffle

3. Terry has 9 small triangles: 3 of them are red (R), 3 are yellow (Y) and 3 are blue (B). He wants to form a big triangle by putting together these 9 small triangles so that any two triangles with an edge in common are different colors. Terry places some small triangles as shown in the picture. Which of the following statements is true after he has finished?



- A. 1 and 3 are blue
B. 1 is blue and 5 is yellow
C. 1 and 3 are yellow
D. 2 and 4 can only be red
E. 4 is blue and 5 is yellow

4. Jack has the 5 stickers shown:

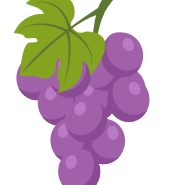
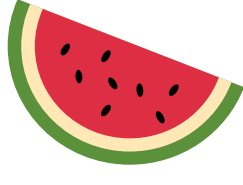
He placed each of them on the 5 squares of this board

1	2	3	4	5
---	---	---	---	---

one on each square, so that is not on square 3, is on square 4, and

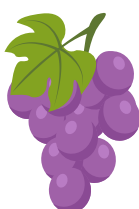
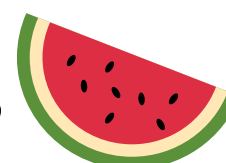
is next to and . On which square did Jack place ?

- A. 1
B. 2
C. 3
D. 4
E. 5

5. Ketty has the 5 stickers shown:     

She placed each of them on the 5 squares of this board

1	2	3	4	5
---	---	---	---	---

one on each square, so that  is not on square 1 or 5,  is on square 2, and  is next to . On which square did Ketty place ?

A. 1

B. 2

C. 3

D. 4

E. 5

Word Reasoning

Day 2 & Day 3

1. You fall into a story book and you want to find out the name of the first character you met there. You asked him:

“Are you Jason Dylan Mark?”

“Are you Martin Dylan Pumpkin?”

“Are you Jason Max Pumpkin?”

Each time exactly one name and its position are right. What is the name of that character?

A. Jason Dylan Mark

B. Martin Max Pumpkin

C. Martin Max Mark

D. Jason Max Pumpkin

E. Martin Dylan Mark

2. You want to help Victoria put her books on the shelf. You ask her:

“Do you want to put Math, Chinese, English books there?”

“Do you want to put Latin, Spanish, English books there?”

“Do you want to put Latin, Chinese, Science books there?”

Each time exactly one book and its position are right. What is the order of books to be put on the shelf?

A. Math, Chinese, Science

B. Math, Chinese, English

C. Latin, Chinese, English

D. Math, Spanish, Science

E. Latin, Spanish, English

3. You want to help Zoe arrange dresses in the wardrobe. You ask her:

“Do you want to put black, green, blue dresses there?”

“Do you want to put yellow, red, blue dresses there?”

“Do you want to put yellow, green, pink dresses there?”

Each time exactly one dress and its position are right. What is the order of dresses to be put in the wardrobe?

A. black, red, pink

B. black, green, pink

C. black, red, blue

D. yellow, red, blue

E. yellow, green, pink

4. Thomas forgot the password of a lock. The password was a five-digit number. His father said:"It may be 32154." His mother said:"It may be 37654." His uncle said:"It may be 47154." His aunt said:"It may be 37194." His cousin said:"It may be 37158."

Each time exactly one digit and its position were right. What was the password of the lock?

A. 47198

B. 42698

C. 37194

D. 32658

E. 37198

5. Jane forgot the password of a lock. The password was a five-letter code. Her father said:"It may be ADGRT." Her mother said:"It may be ACGHT." Her uncle said:"It may be ACERT." Her aunt said:"It may be ACGRM." Her cousin said:"It may be BCGRT."

Each time exactly one letter and its position were right. What was the password of the lock?

A. BDGHT

B. BDEHM

C. ACERM

D. ADEHT

E. ADGRM

----- Take a rest! -----

6. The vase was broken!

Dory said: "Audrey broke it."

Audrey said: "Tim broke it."

Tim said: "Audrey lied."

Justin said: "I didn't do it."

Only one of them told the truth. Thus, _____ told the truth and _____ broke the vase.

A. Audrey, Tim

B. Tim, Justin

C. Tim, Dory

D. Dory, Audrey

E. Justin, Dory

7. There are five children: May, Derek, Aidan, Tina and Olivia. One of them ate a cookie.

May says: "Aidan did not eat the cookie."

Derek says: "I ate the cookie."

Aidan says: "Olivia ate the cookie."

Tina says: "Derek did not eat the cookie."

Olivia says: "May did not ate the cookie."

Only one child is lying. Who ate the cookie?

A. May

B. Derek

C. Aidan

D. Tina

E. Olivia

8. There are five dogs in a line: Dora, Oreo, Charlie, Joe, and Apple. One of them got a treat.

Dora says: "I did not get the treat!"

Oreo says: "I was so close... but I did not get the treat..."

Charlie says: "Dora got the treat."

Joe says: "Charlie did not get the treat."

Apple says: "Joe did not get the treat and neither did I."

Only one dog is lying. Who got the treat?

A. Dora

B. Oreo

C. Charlie

D. Joe

E. Apple

9. There are three kids: Tom, Vera, and Cindy. They are talking about watermelon.

Tom says: "I know Vera doesn't like eating watermelon."

Vera says: "I think Tom is wrong."

Cindy says: "I like eating watermelon very much."

Only one of them is telling the lie. Who likes eating watermelon?

A. Tom

B. Vera

C. Cindy

D. All of them

E. No one

10. There are three kids: Jim, Tim and Gina. They are talking about chocolate.
Jim says: "I don't like chocolate at all."
Tim says: "I know Gina likes chocolate."
Gina says: "I disagree with Jim."
Only one of them is telling the lie. Who likes chocolate?

A. Jim

B. Tim

C. Gina

D. All

E. No one

Fun Math

Day 4

1. Vivian replaces shapes in the calculation with numbers from 1 to 9 and then calculates the result. The same shapes are replaced by the same numbers. Different shapes are replaced by different numbers. When the result of expression in figure 1 is maximized, what is the result of the expression in figure 2?

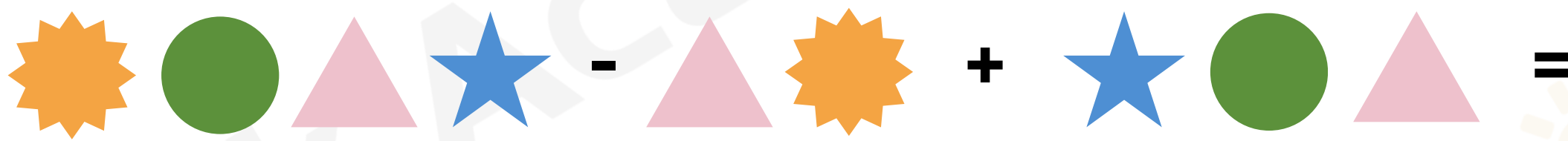

$$\star \bigcirc \triangle \star - \triangle \star + \star \bigcirc \triangle =$$

Figure 1

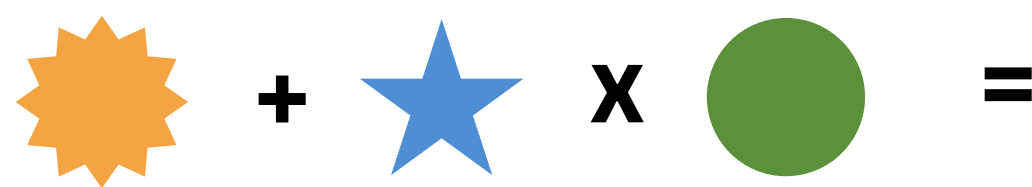

$$\star + \star \times \bigcirc =$$

Figure 2

- A. 56 B. 64 C. 65 D. 96 E. 128

2. Brian replaces letters in the calculation $KAN + RO - O - GA$ with numbers from 1 to 9 and then calculates the result. The same letters are replaced by the same numbers. Different letters are replaced by different numbers. What is the smallest possible result he could get?

- A. 60 B. 61 C. 65 D. 72 E. 73

3. Aria replaces letters in the calculation $MATH - A + ME - TIC + S$ with numbers from 1 to 9 and then calculates the result. The same letters are replaced by the same numbers. Different letters are replaced by different numbers. What is the largest possible result she could get?

- A. 9500 B. 9678 C. 9784 D. 9787 E. 9890

4. Fill the numbers from 1 to 9 in the squares and circles to satisfy the relationship in the figure below. Each number can be used only once. The numbers in all the squares are odd numbers, and the numbers in all the circles are all even numbers. I = _____ .

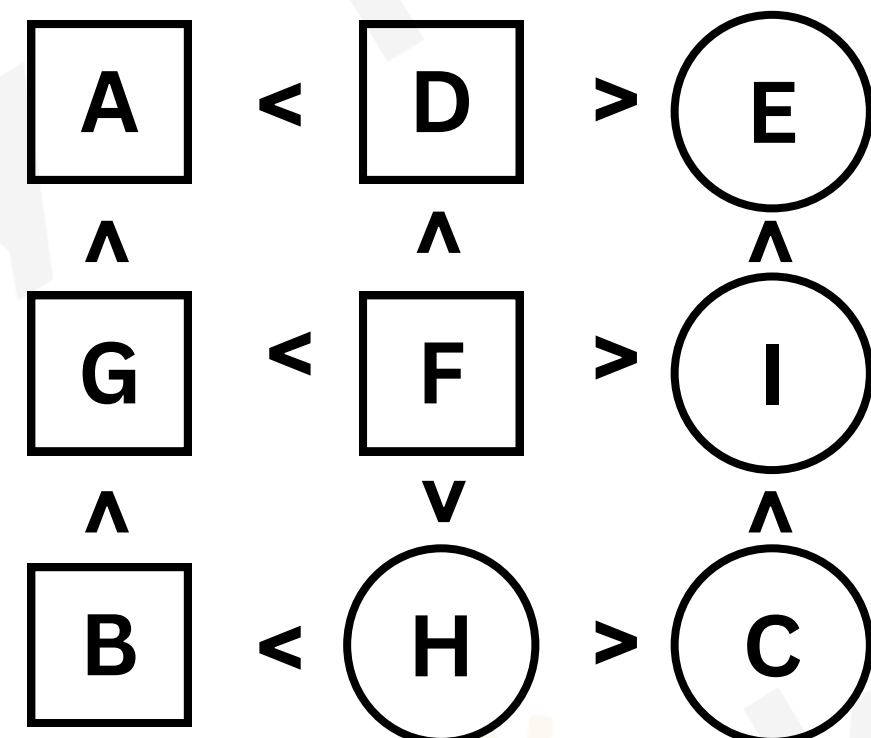
A. 1

B. 2

C. 4

D. 6

E. 8



5. Eleni wants to write the numbers from 1 to 9 in the squares shown. The arrows always point from a smaller number to a larger one. She has already written 3 and 7. Which number should she write instead of the question mark?

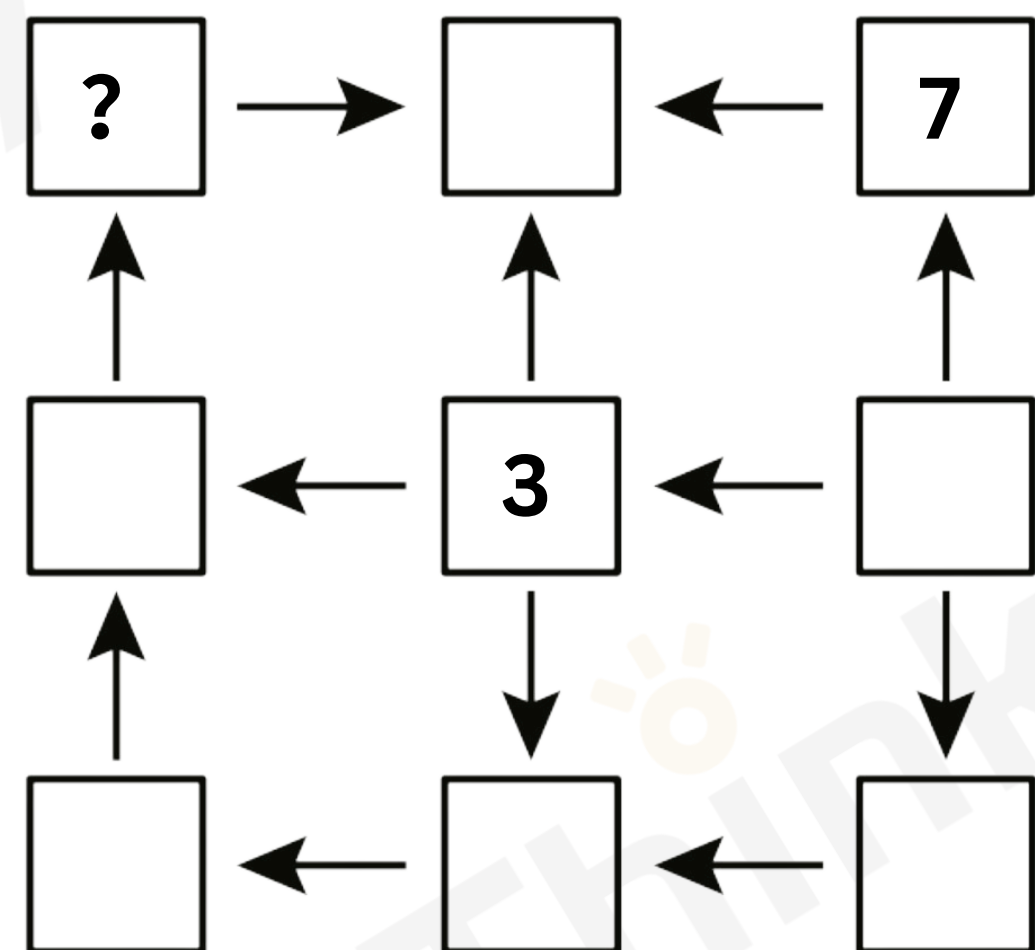
A. 9

B. 8

C. 6

D. 4

E. 2



Week Review

Day 5

1. Jerry replaces shapes in the calculation with numbers from 1 to 9 and then calculates the result. The same shapes are replaced by the same numbers. Different shapes are replaced by different numbers. When the result of expression in figure 1 is minimized, what is the result of the expression in figure 2?

$$\heartsuit \blacktriangle \star \bullet + \blacktriangle \heartsuit \star - \heartsuit \bullet \blacktriangle =$$

Figure 1

$$(\heartsuit + \star) \times \bullet =$$

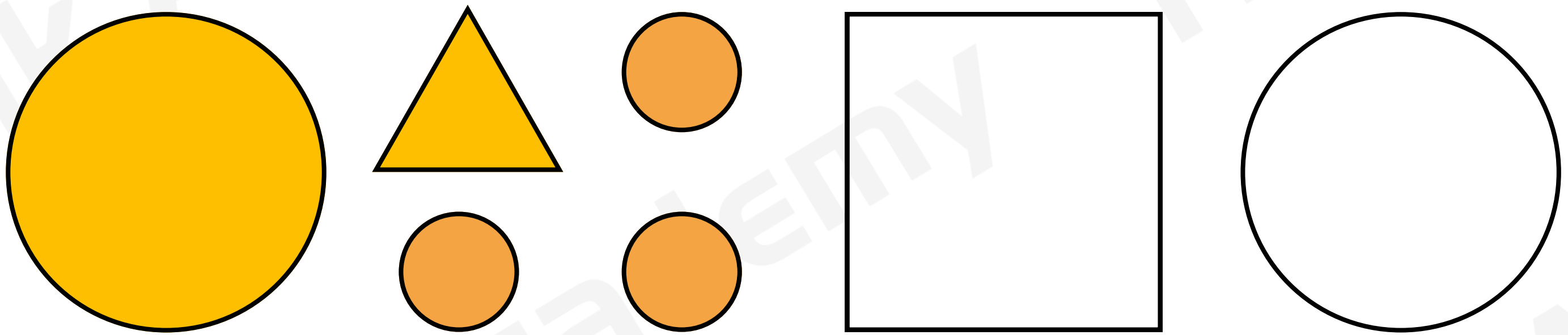
Figure 2

- A. 30 B. 36 C. 56 D. 64 E. 63

2. There are 6 people in the hair salon waiting to style and dye their hair. Among them, there are 3 wanting long hair, 2 wanting medium hair, and 1 wanting short hair. In the hair salon, there are only 6 jars of hair dye available: 3 blonde, 2 red, and 1 purple. Suppose each jar can be used to only one person, and everyone in the salon wants different hairstyle, meaning they have to be either different in color or different in length. Which hairstyle of the following is impossible?

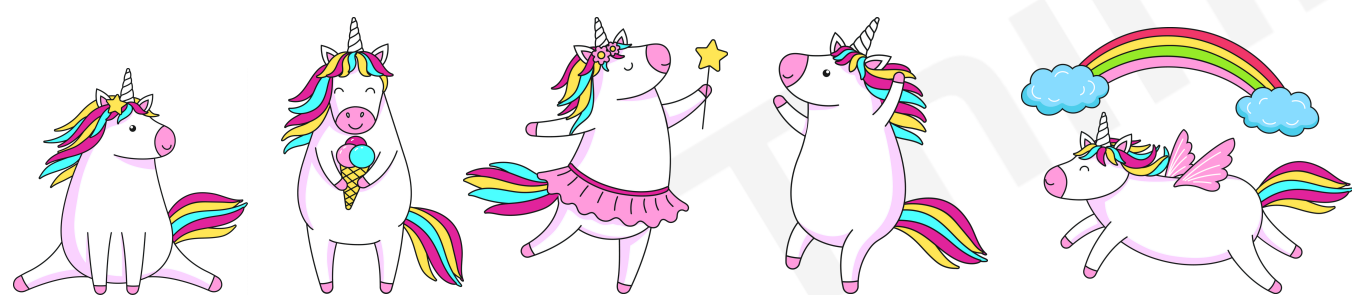
- A. Short red hair B. Short blonde hair C. Long blonde hair
D. Long red hair E. Medium red hair

3. Jade chose a few of the shapes shown below and said, "Among the shapes I chose, there are 2 colored shapes, 3 round shapes, but only 1 large shape." What is the smallest number of shapes that Jade could have chosen?



- A. 7 B. 6 C. 5 D. 4 E. 3

4. Helen has the 5 stickers shown:



She placed each of them on the 5 squares of this board

1	2	3	4	5
---	---	---	---	---

one on each square, so that  is not on square 1,  is on square 5,

and  is next to  and . On which square did Helen

place



?

- A. 1 B. 2 C. 3 D. 4 E. 5

5. The cheese is stolen!

Cat said: "Mouse took it."

Mouse said: "I know Chick did not do it."

Dog said: "I did not take it."

Chick said: "Mouse is lying."

Only one of them is lying. Thus, _____ told the lie and _____ stole the cheese.

- A. Dog, Mouse B. Mouse, Cat C. Chick, Mouse
D. Cat, Chick E. Mouse, Dog



**CONGRATULATIONS!
YOU FINISHED WEEK 1!**

Answers

Picture Reasoning - Day 1
DEBBA

Word Reasoning - Day 2&3
CDABB BEACC

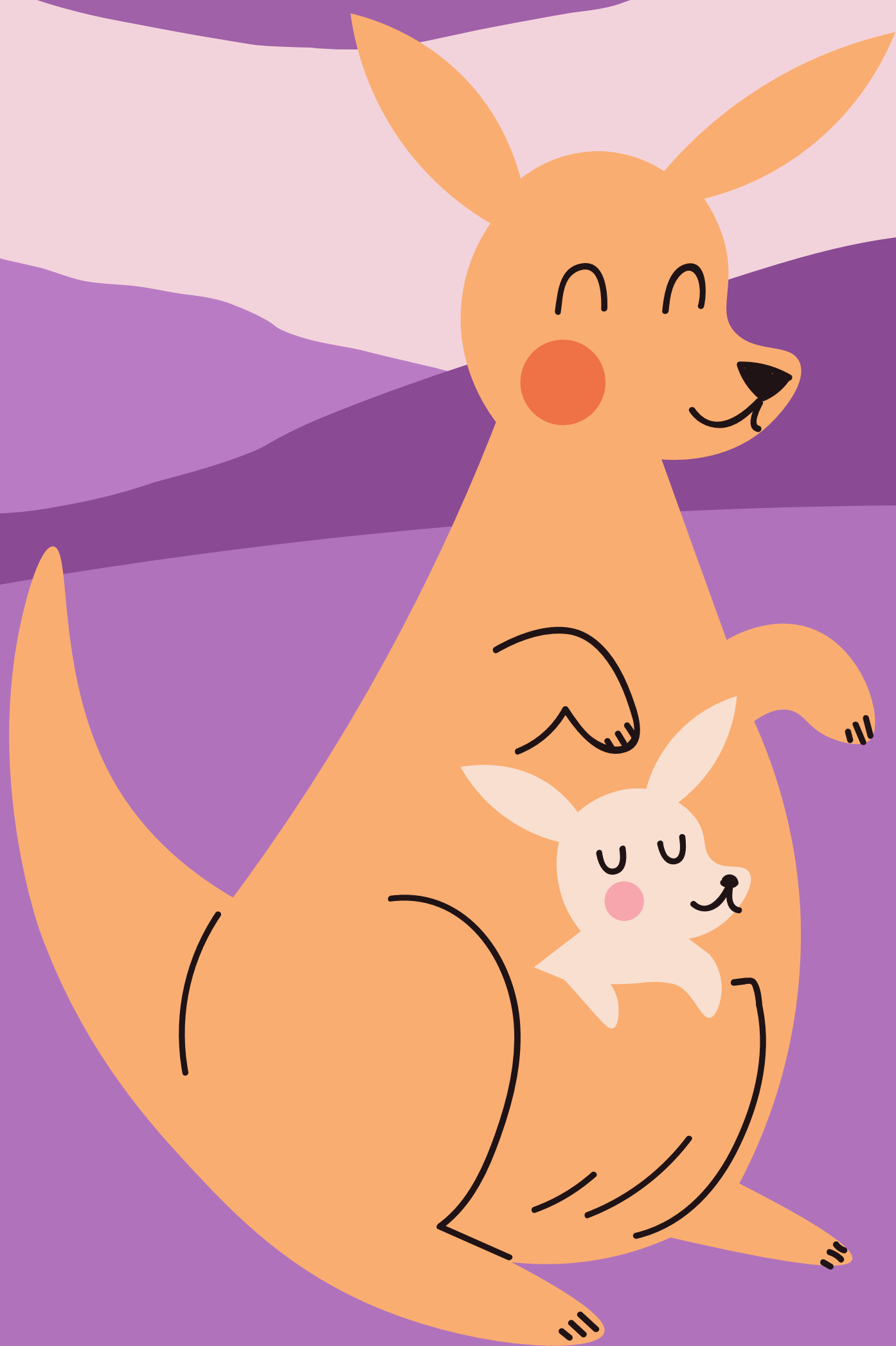
Fun Math - Day 4
CBD CB

Week Review - Day 5
BAEBC

MK 5-POINTERS WORKBOOK

LV3-4

Word Problem

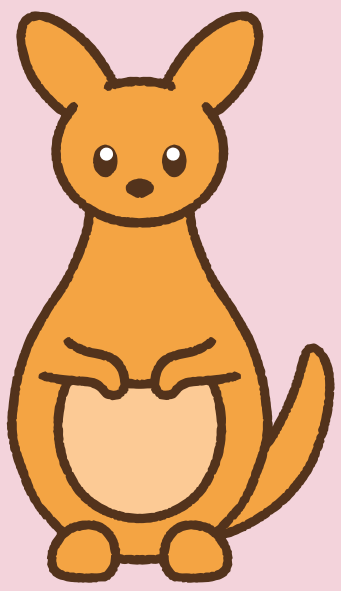


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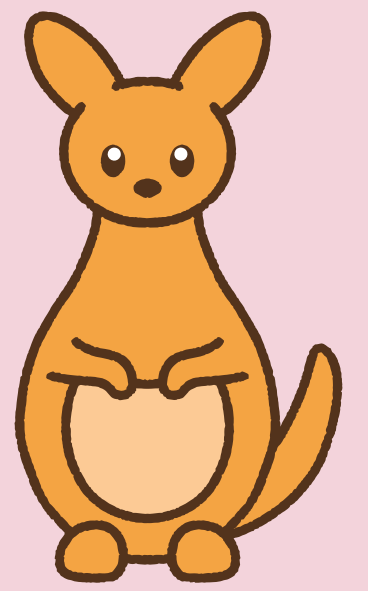


WeChat

WhatsApp

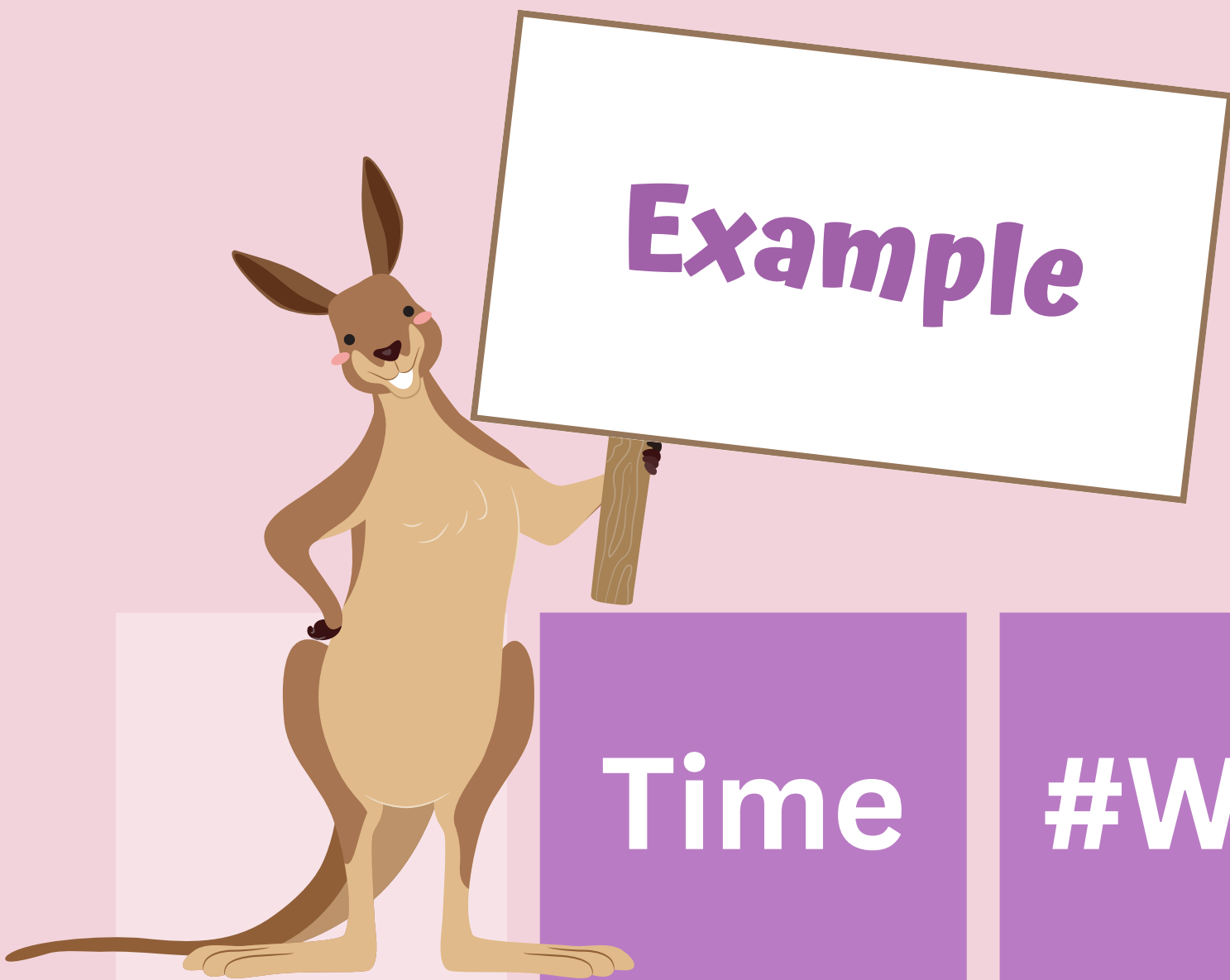


WORKBOOK GUIDELINE



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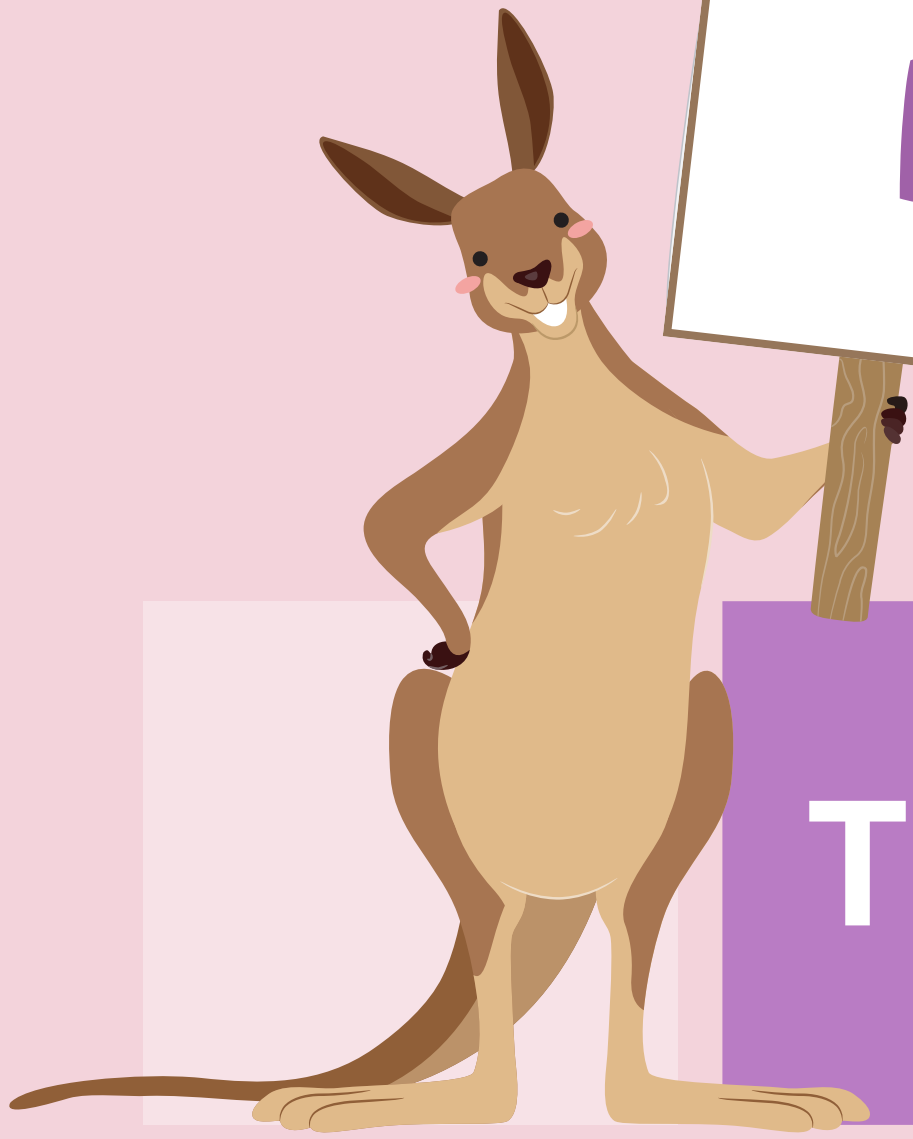


WEEK 0

	Time	#Wrong	Difficulty ★ ★ ★
Mon	30 min	2	★ ★ ★

Word Problem

WEEK 2



Time

#Wrong

Difficulty



Mon

Tue

Wed

Thu

Fri

Page Problem

Day 1 & 2

1. How many digits have to be written in order to write down every digit from 1 to 200 inclusive?

- A. 400 B. 450 C. 490 D. 492 E. 500

2. From 1 to 100 inclusive, how many times does digit 1 appear?

- A. 19 B. 20 C. 21 D. 22 E. 23

3. From 1 to 100 inclusive, how many times does digit 0 appear?

- A. 19 B. 17 C. 14 D. 11 E. 10

4. A story book has 199 pages which are numbered from 1 to 199. How many digits are used in numbering this book?



- A. 478 B. 398 C. 478 D. 199 E. 489

5. A fiction book has 220 pages which are numbered from 1 to 220. How many digits are used in numbering this book?

A. 542

B. 552

C. 562

D. 564

E. 568

----- Take a rest! -----

6. A fiction book has 106 pages which are numbered from 1 to 106. How many digits are used in numbering this book?

A. 210

B. 204

C. 199

D. 212

E. 106

7. A book has 156 pages, numbered from 1 to 156. How many times does the digit 5 appear in numbering those pages?

A. 31

B. 32

C. 33

D. 34

E. 35

8. A book has 198 pages, numbered from 1 to 198. How many times does the digit 9 appear in numbering those pages?

A. 39

B. 38

C. 37

D. 36

E. 35

9. A novel is numbered consecutively from page 1. The digit 4 appears exactly 15 times. How many pages are there in this novel at most?



A. 49

B. 50

C. 51

D. 52

E. 53

10. A novel is numbered consecutively from page 1. The digit 4 appears exactly 15 times. How many pages are there in this novel at least?

A. 49

B. 50

C. 51

D. 52

E. 53

Chicken & Rabbit

Day 3

1. Several teams came to the summer Think Camp. Each team has 6 or 7 members. There are 32 people in total. How many teams are there at this camp?

- A. 4 B. 5 C. 6 D. 7 E. 8

2. Judy bought some comic books and novels in Think Bookstore. Each comic book costs 2 dollars and each novel costs 5 dollars. She bought 8 books in total and the total price is 22 dollars. How many novels did she buy?



- A. 2 B. 3 C. 4 D. 5 E. 6

3. There were 12 pieces of paper. Some of them were cut into 5 pieces. As a result, there are now 40 pieces of paper. How many pieces of paper were not cut?

- A. 2 B. 3 C. 4 D. 5 E. 6

4. There are 15 questions in a test. The participant can get 3 points for a correct answer, and lose 1 point for an incorrect or skipped question. Zoe got 21 points on this test. how many questions did she get correct?

- A. 12 B. 11 C. 10 D. 9 E. 8

5. In a certain quiz show there are following rules: every participant has 5 points at the beginning and has to answer 15 questions. For each correct answer, the participant earns 2 points and for each incorrect answer, the participant loses 1 point. Audrey had 29 points at the end of the quiz show. How many correct answers did she give?



A. 12

B. 13

C. 14

D. 15

E. 16

Competitions and Scores

Day 4

1. In a basketball game the winner gains 3 points, while the loser gains 0 points. If the game is a tie, then the two teams gain 1 point each. Thinkie team played 20 games and gained 38 points. Find the greatest number of games that the team lost.



- A. 4 B. 5 C. 6 D. 7 E. 8

2. In a soccer game the winner gains 5 points, while the loser gains 0 points. If the game is a tie, then the two teams gain 2 point each. A certain team played 10 games and gained 27 points. Find the smallest number of games that the team lost.



- A. 0 B. 1 C. 2 D. 3 E. 4

3. In a soccer game the winner gains 5 points, while the loser gains 0 points. If the game is a tie, then the two teams gain 2 point each. A certain team played 10 games and gained 27 points. Find the greatest number of games that the team lost.

- A. 0 B. 1 C. 2 D. 3 E. 4

4. Three football teams participate in a sport tournament. Each team plays with the other two teams exactly once. In each game, the winner gets 5 points and the loser doesn't get any points. If the game ends in a tie, each team gets 2 points. At the end of the tournament, which number of points is impossible for any team to have?

A. 2

B. 4

C. 7

D. 8

E. 10

5. Four football teams participate in a sport tournament. Each team plays with the other three teams exactly once. In each game, the winner gets 5 points and the loser doesn't get any points. If the game ends in a tie, each team gets 2 point. At the end of the tournament, which number of points is impossible for any team to have?

A. 6

B. 9

C. 10

D. 12

E. 11

Review

Day 5

1. A story book has 101 pages which are numbered from 1 to 101. How many digits are used in numbering this book?

- A. 193 B. 194 C. 195 D. 196 E. 197

2. A book is numbered consecutively from page 1. The digit 9 appears exactly 21 times. How many pages are there in this novel at most?

- A. 109 B. 119 C. 118 D. 128 E. 129

3. There were 10 pieces of paper. Some of them were cut into 6 pieces. As a result, there are now 30 pieces of paper. How many pieces of paper were cut?

- A. 2 B. 3 C. 4 D. 5 E. 6

4. In a certain quiz show there are following rules: every participant has 12 points at the beginning and has to answer 20 questions. For each correct answer, the participant earns 3 coins and for each incorrect answer, the participant loses 1 point. Justin had 12 points at the end of the quiz show. How many incorrect answers did he give?

- A. 12 B. 13 C. 14 D. 15 E. 16

5. In a basketball game the winner gains 3 points, while the loser gains 0 points. If the game is a tie, then the two teams gain 1 point each. Thinkie team played 20 games and gained 38 points. Find the greatest number of games that the team lost.

- A. 2 B. 4 C. 6 D. 8 E. 10



**CONGRATULATIONS!
YOU FINISHED WEEK 2!**

Answers

Page Problem - Day 1&2
DCDEB ACBEA

Chicken & Rabbit - Day 3
BADDB

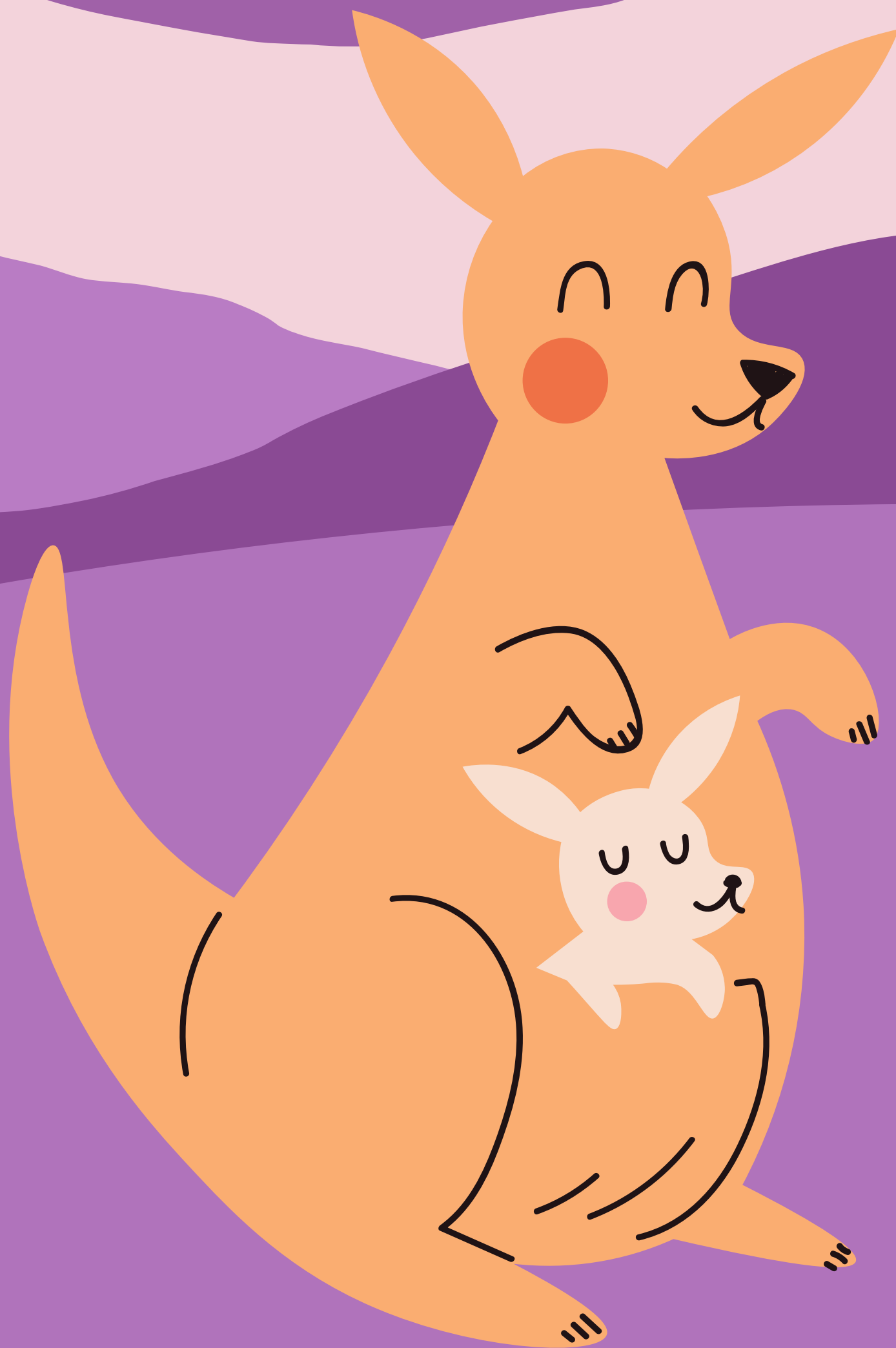
Competitions & Scores - Day 4
CBEDE

Week Review - Day 5
CCCDC

MK 5-POINTERS WORKBOOK

LV3-4

Number and Operations

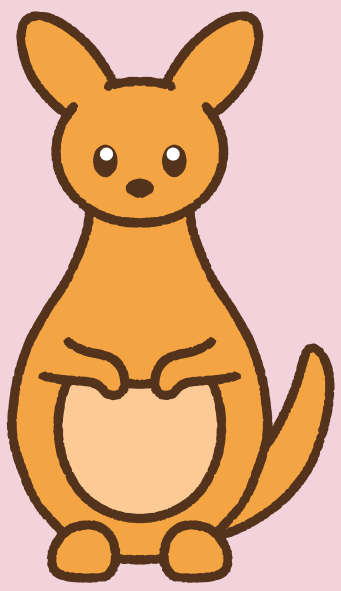


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WeChat

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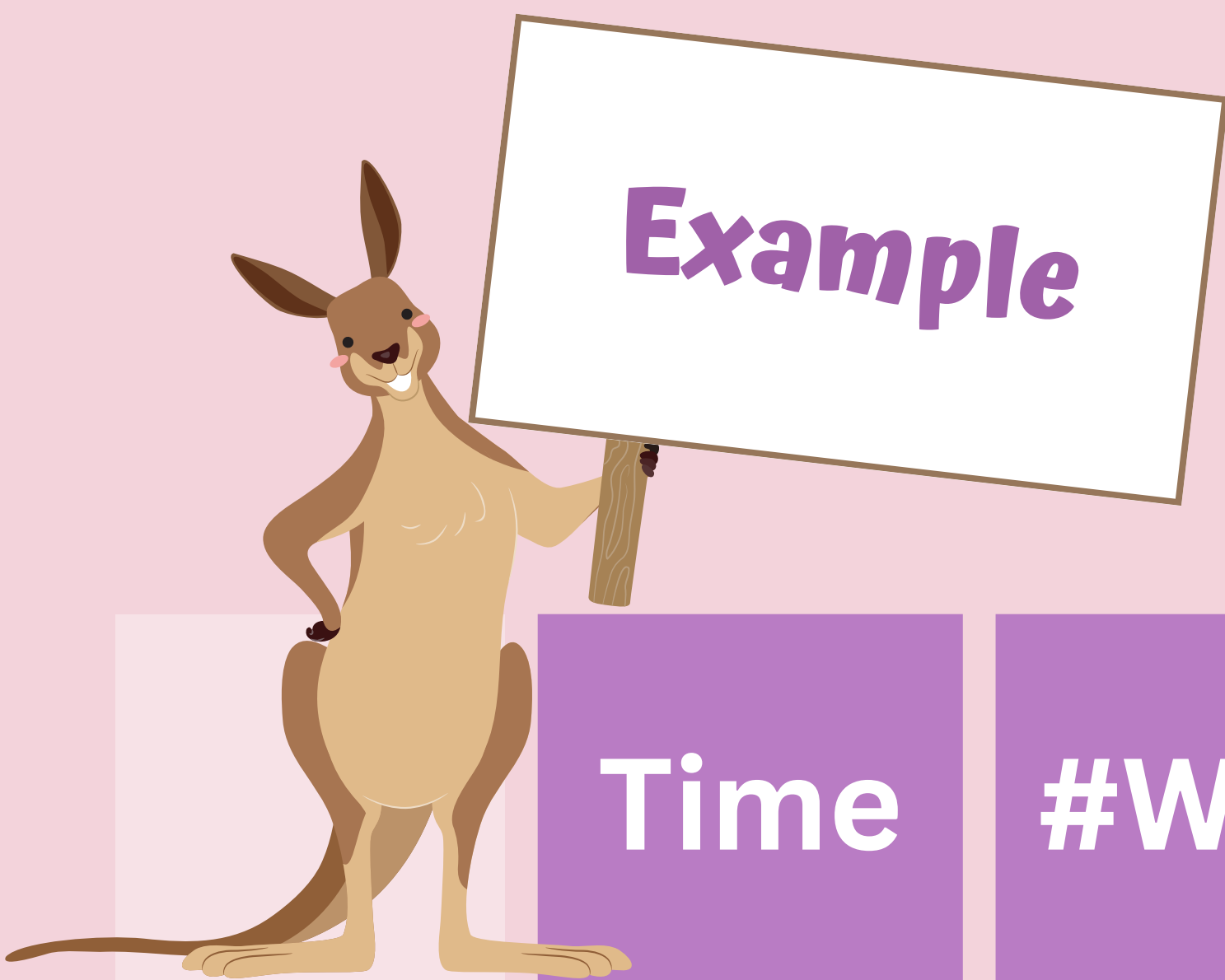


WORKBOOK GUIDELINE



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WEEK 0

	Time	#Wrong	Difficulty ★ ★ ★
Mon	30 min	2	★ ★ ★

Number and Operations

WEEK 3



Time

#Wrong

Difficulty



Mon

Tue

Wed

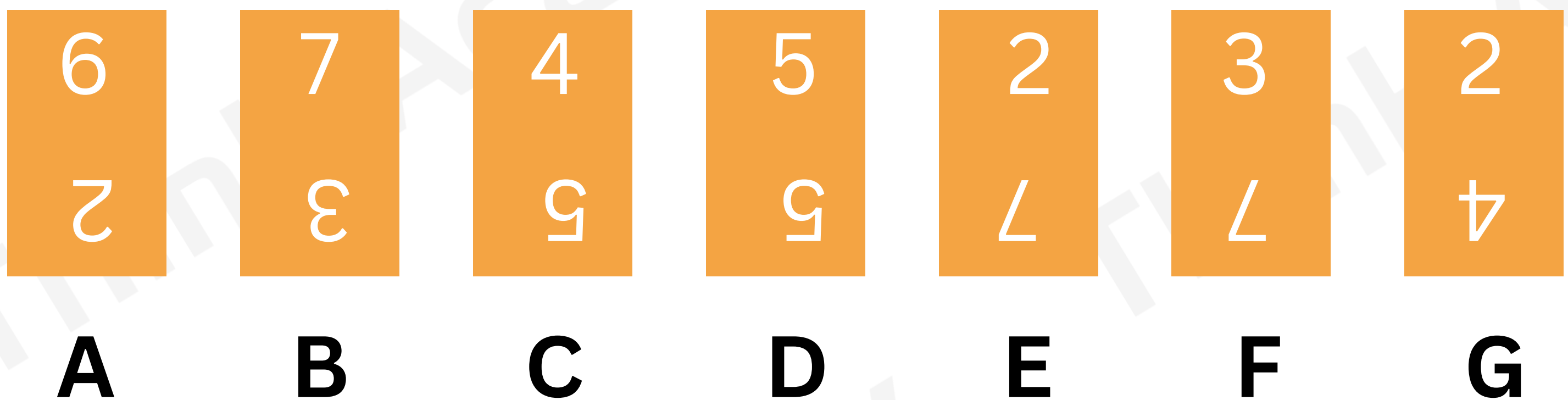
Thu

Fri

Fun Calculation

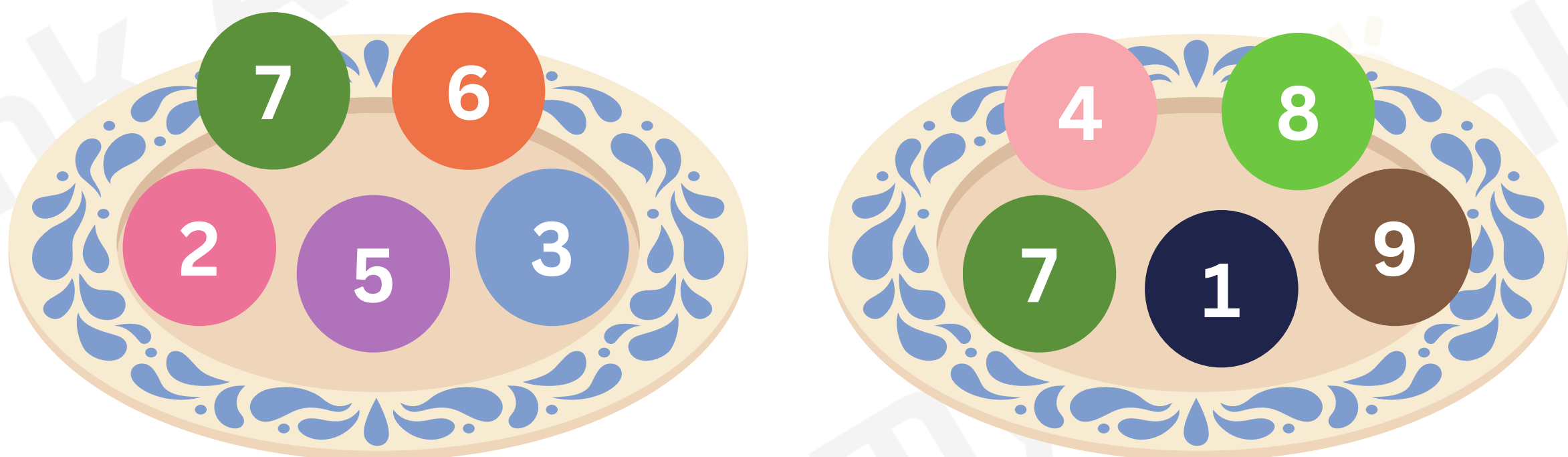
Day 1

1. 7 cards are arranged as shown. Each card has two numbers on it, with one of them written upside down. The teacher wants to rearrange the cards so that the sum of the numbers in the top row is the same as the sum of the numbers in the bottom row. She can do this by turning one of the cards upside down. Which card must she turn?



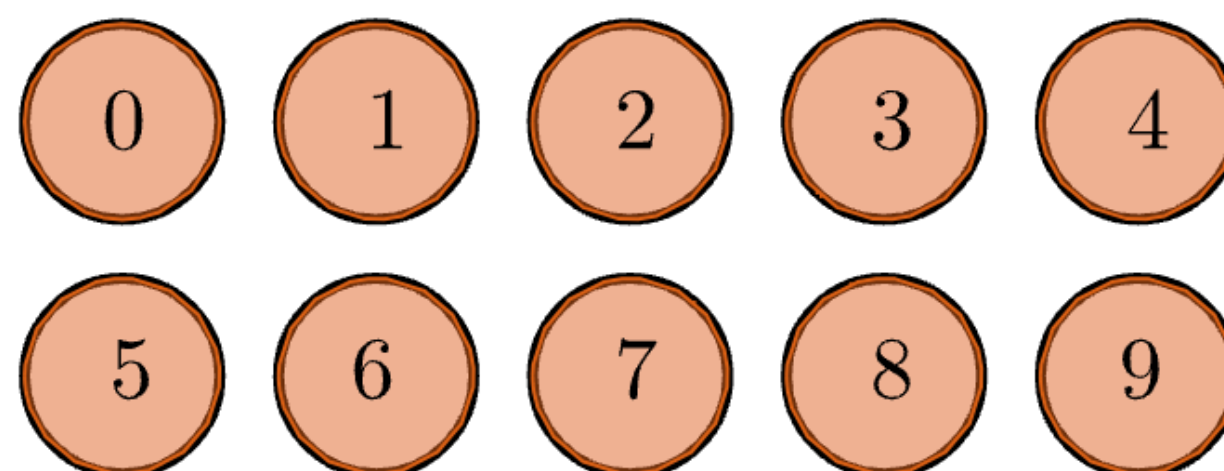
- A. A B. C C. D D. E E. G

2. Which of the following pairs of two balls should be exchanged so that the numbers on two plates have the same sum?



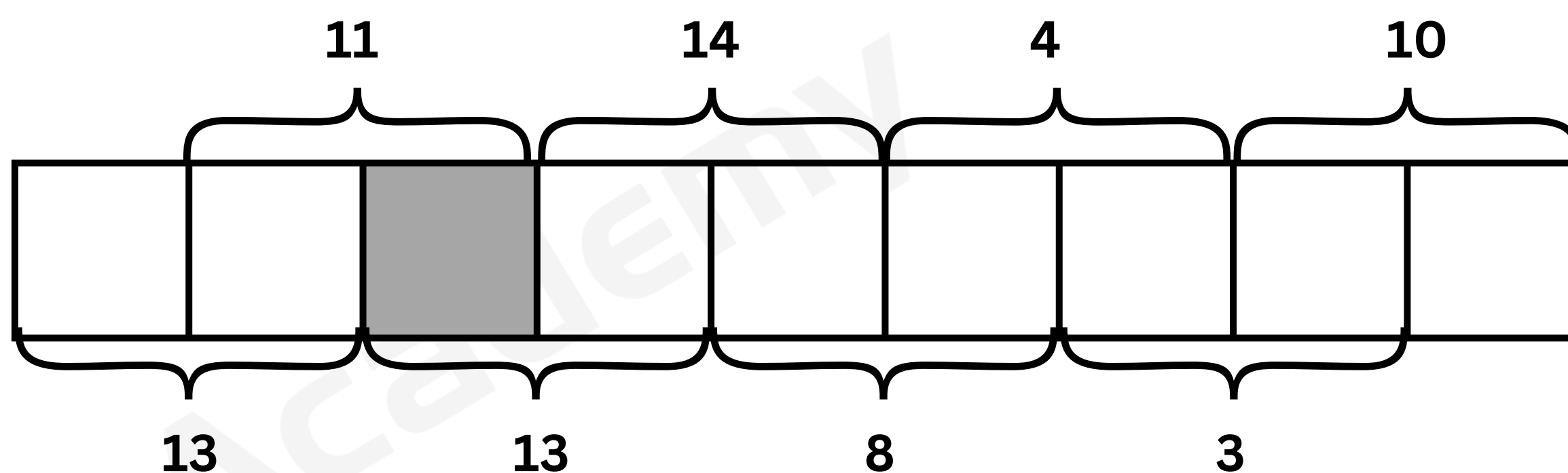
- A. 2 and 7 B. 5 and 8 C. 6 and 1 D. 6 and 8 E. 3 and 9

3. Dylan has ten balls, numbered from 0 to 9. He gave four of the balls to George and three to Zoe. Then each of the three friends multiplied the numbers on their balls. As the result, Dylan got 0. George got 96, and Zoe got 60. What is the sum of the numbers on the balls that Dylan kept for himself?



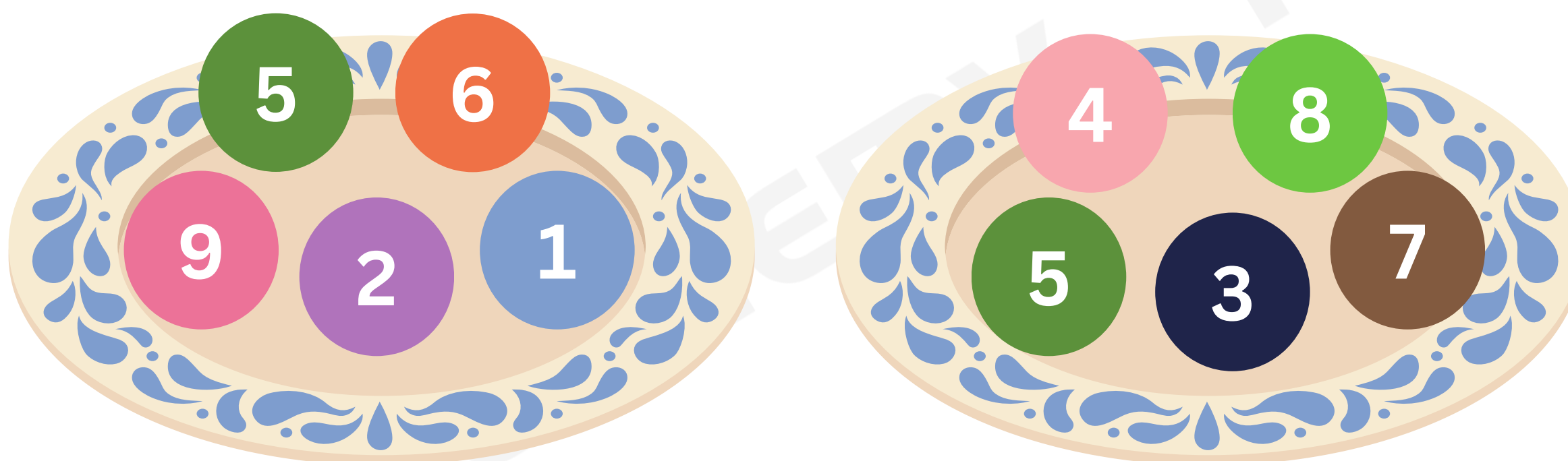
- A. 16 B. 15 C. 14 D. 13 E. 12

4. The numbers 1 to 9 are placed in the squares shown, with a number in each square. The sums of all pairs of neighboring numbers are shown. Which number is in the shaded square?



- A. 6 B. 5 C. 4 D. 8 E. 7

5. Which of the following pairs of two balls should be exchanged so that the numbers on two plates have the same sum?



- A. 9 and 7 B. 5 and 3 C. 2 and 5 D. 6 and 8 E. 1 and 4

Divisibility

Day 2

1. A box has fewer than 50 cookies in it. The cookies can be divided evenly between 2, 3 or 4 children. However, they cannot be divided evenly between 7 children because 4 more cookies would be needed. How many cookies are there in the box?

- A. 12 B. 24 C. 30 D. 36 E. 48

2. A box has fewer than 50 candies in it. The candies can be divided evenly between 3 or 5 children. However, they cannot be divided evenly between 7 children because 4 more cookies would be needed. How many candies are there in the box?

- A. 15 B. 25 C. 30 D. 35 E. 45

3. Jade has less than 40 game coins. The game coins can be divided evenly between 2, 3 or 5 students. However, they cannot be divided evenly between 9 students because 6 more game coins would be needed. How many game coins does Jade have?

- A. 20 B. 24 C. 30 D. 36 E. 40

4. Annie, Bella, Chad, Denny, and Elsa were baking cookies on Friday and Saturday. Over the two days, Annie made 28 cookies, Bella 30, Chad 32, Denny 33, and Elsa 34. Over the two days, one of them made twice as many cookies as on Friday, one 3 times as many, one 4 times as many, one 5 times as many, and one 7 times as many. Who baked the most cookies on Friday?

- A. Annie B. Bella C. Chad D. Denny E. Elsa

5. Anna, Berta, Charlie, David, and Elisa were baking cookies on Friday and Saturday. Over the two days, Anna made 34 cookies, Berta 35, Charlie 36, David 39, and Elisa 40. Over the two days, one of them made twice as many cookies as on Friday, one 3 times as many, one 4 times as many, one 5 times as many, and one 6 times as many. Who baked the most cookies on Friday?

- A. Anna B. Berta C. Charlie D. David E. Elisa

Operation without Numbers

Day 3

1. In the grid, the same number is hidden under the same color square. To the right of each row, the sum of numbers hidden under the squares in that row is given. Which number is hidden under the black square?

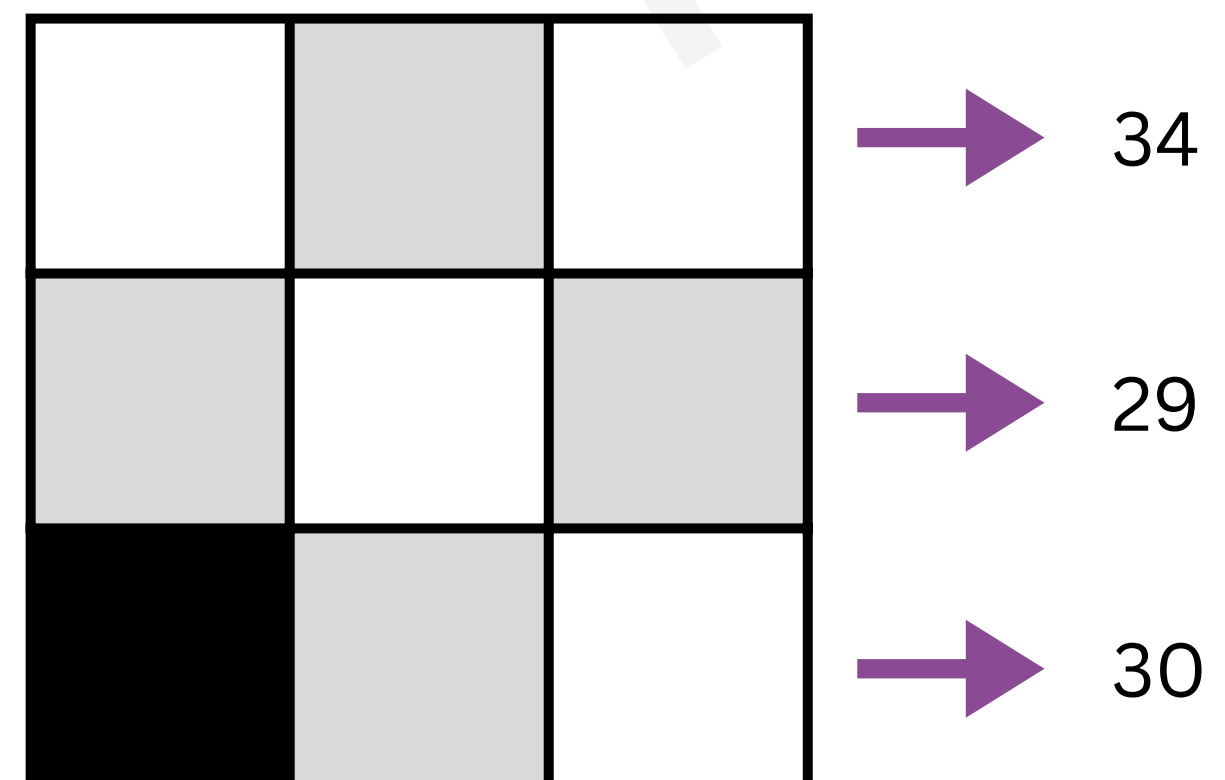
A. 8

B. 9

C. 11

D. 13

E. 15



2. In the grid, the same number is hidden under the same color square. To the right of each row, the sum of numbers hidden under the squares in that row is given. Which number is hidden under the black square?

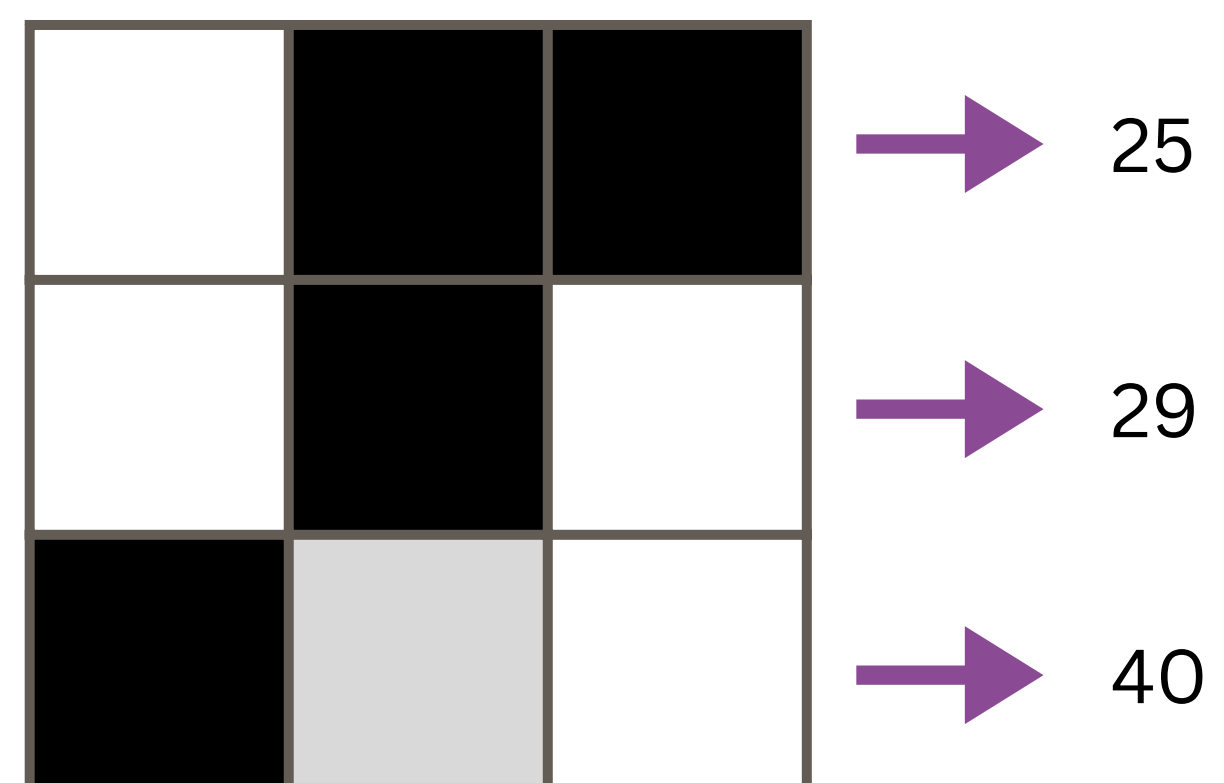
A. 7

B. 9

C. 12

D. 19

E. 21



3. The same shape represents the same number, and different shapes represent different numbers. The circle stands for _____, and the triangle stands for _____.

A. 15, 9

B. 8, 13

C. 9, 15

D. 13, 8

E. 12, 11

$$\begin{aligned}
 & \text{Circle} + \text{Circle} + \text{Circle} + \text{Triangle} = 54 \\
 & \text{Circle} + \text{Triangle} + \text{Triangle} + \text{Triangle} = 42
 \end{aligned}$$

4. In the grid, the same number is hidden under the same color square. To the right of each row, the sum of numbers hidden under the squares in that row is given. Which number is hidden under the black square?

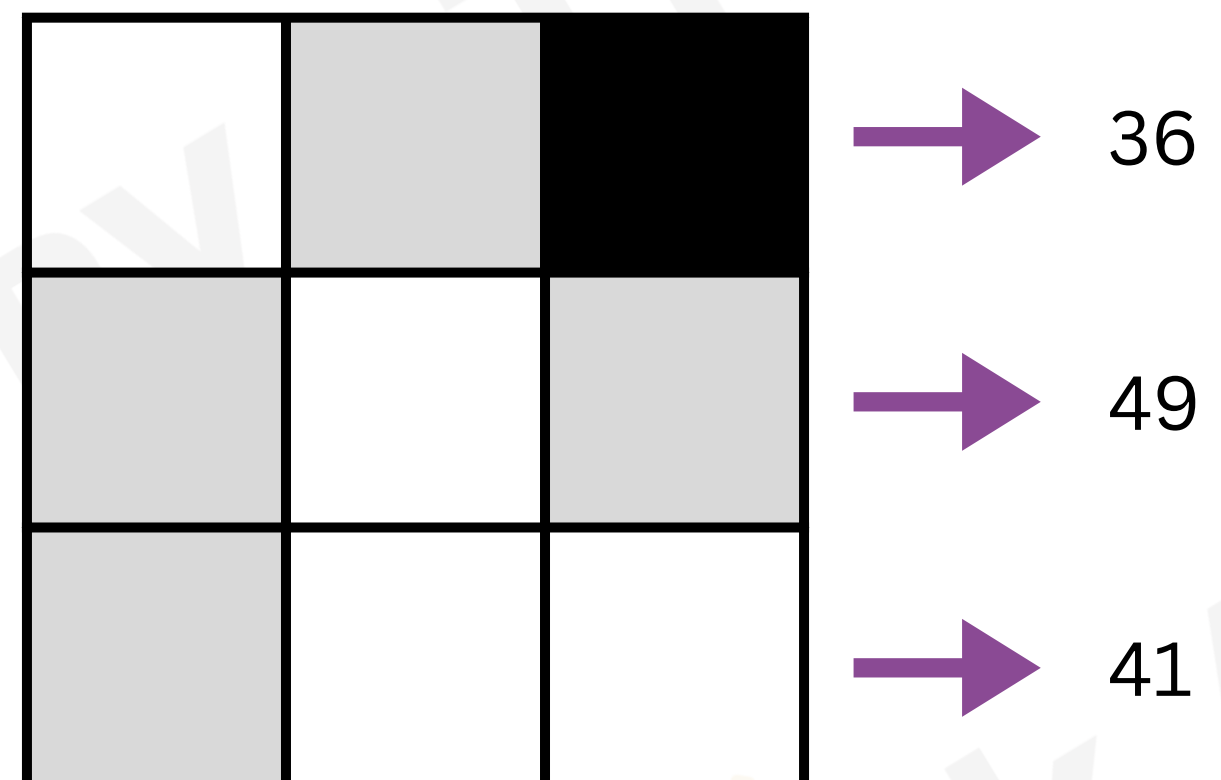
A. 6

B. 9

C. 11

D. 13

E. 19



5. In the grid, the same number is hidden under the same color square. To the right of each row, the sum of numbers hidden under the squares in that row is given. Which number is hidden under the white square?

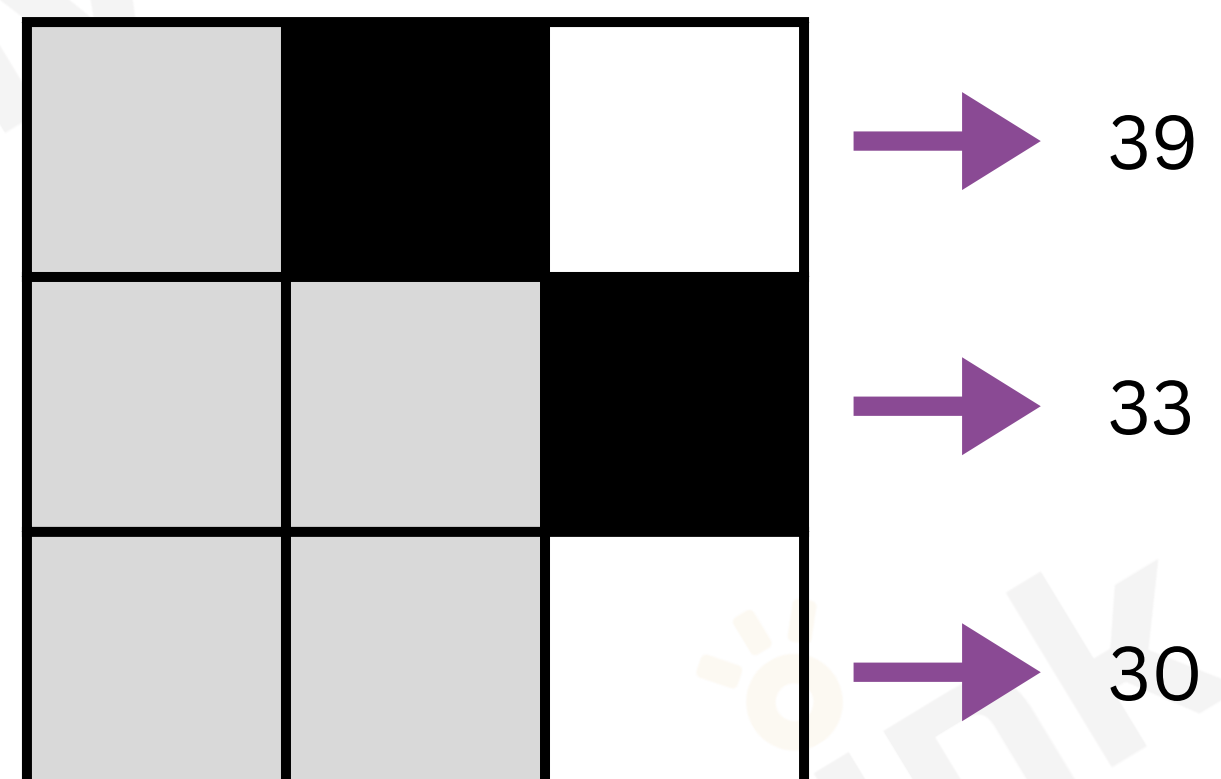
A. 7

B. 8

C. 11

D. 14

E. 17



Least Common Multiple

Day 4

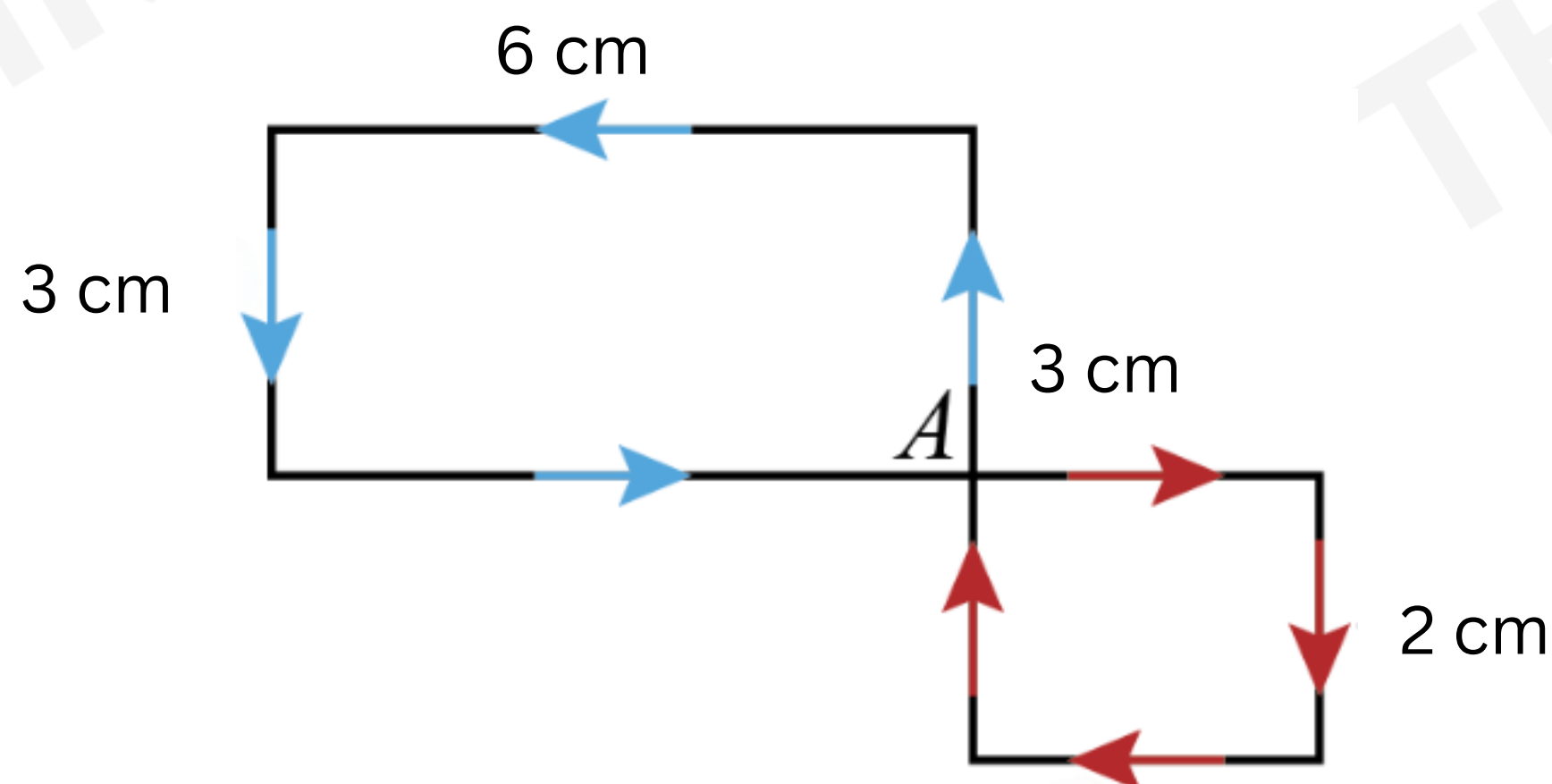
1. Find the least common multiple of each pair of numbers.

(1) 4 and 16

(2) 3 and 4

(3) 10 and 12

2. There are two ants, Annie and Andy. They start moving from point A with the same speed, in the directions shown. Annie moves along the blue arrows, and Andy moves along the red arrows. They meet again at A. What is the smallest number of laps that Annie needs to meet Andy at point A?



A. 3

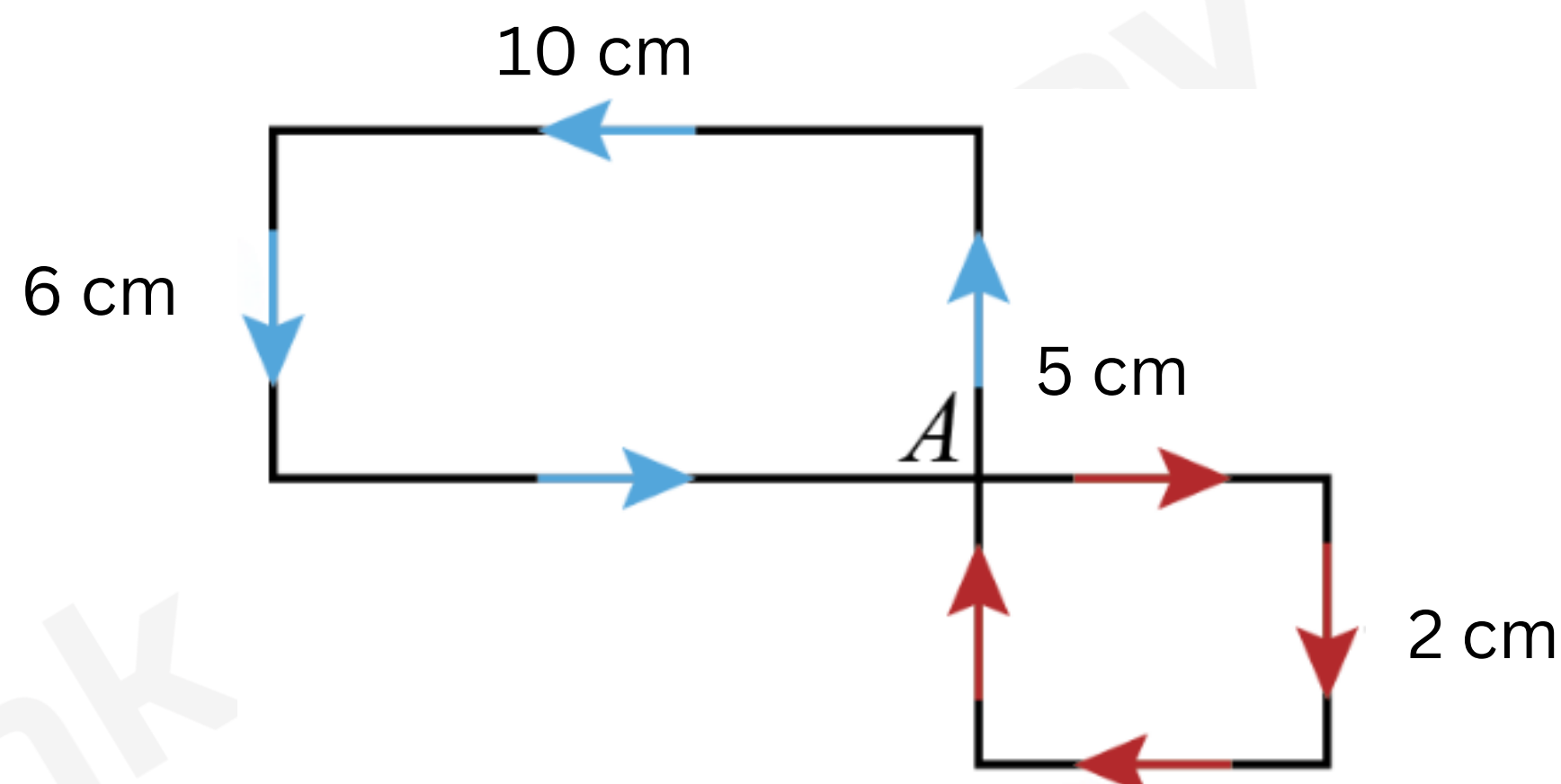
B. 4

C. 5

D. 6

E. 7

3. There are two ants, Bonnie and Bobby. They start moving from point A with the same speed, in the directions shown. Bonnie moves along the blue arrows, and Bobby moves along the red arrows. They meet again at A. What is the smallest number of laps that Bobby needs to meet Bonnie at point A?



A. 13

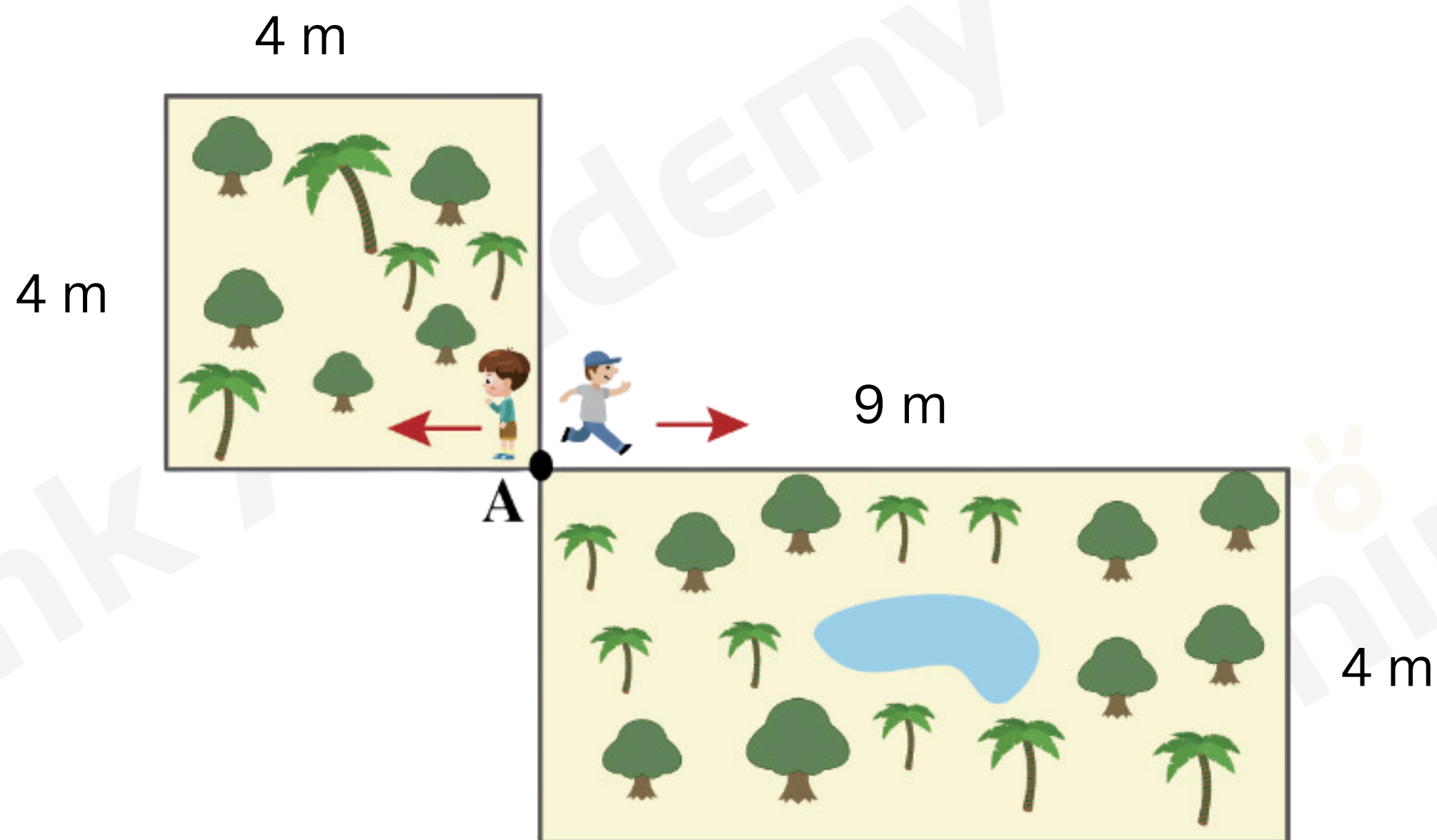
B. 14

C. 15

D. 16

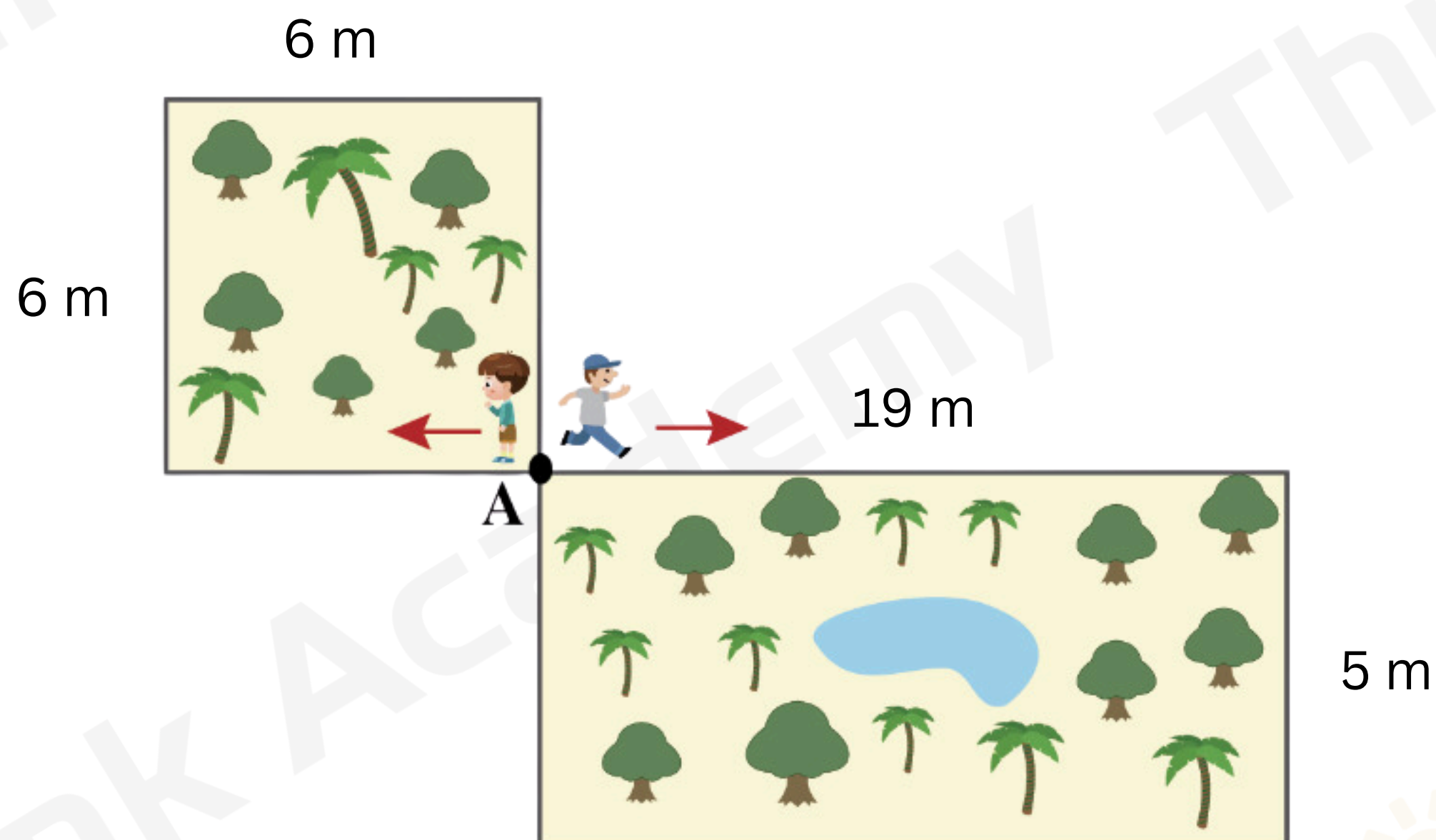
E. 17

4. Jacob and Jason start moving from point A with the same speed, in the directions shown. Jacob walks around the square-shaped garden and Jason walks around the rectangular-shaped one. They meet again at A. What is the smallest number of laps around the square-shaped garden that Jacob can make to meet Jason there?



- A. 13 B. 14 C. 15 D. 16 E. 17

5. Aidan and Andrew start moving from point A with the same speed, in the directions shown. Aidan walks around the square-shaped garden and Andrew walks around the rectangular-shaped one. They meet again at A. What is the smallest number of laps around the square-shaped garden that Aidan can make to meet Andrew there?

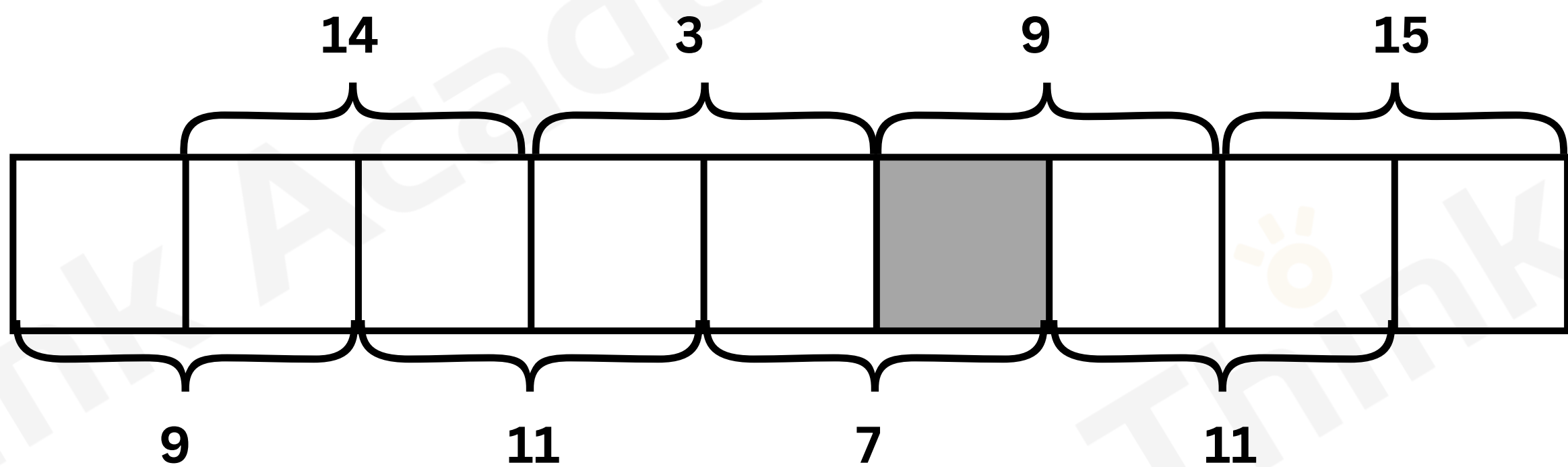


- A. 1 B. 2 C. 3 D. 4 E. 5

Review

Day 5

1. The numbers 1 to 9 are placed in the squares shown, with a number in each square. The sums of all pairs of neighboring numbers are shown. Which number is in the shaded square?

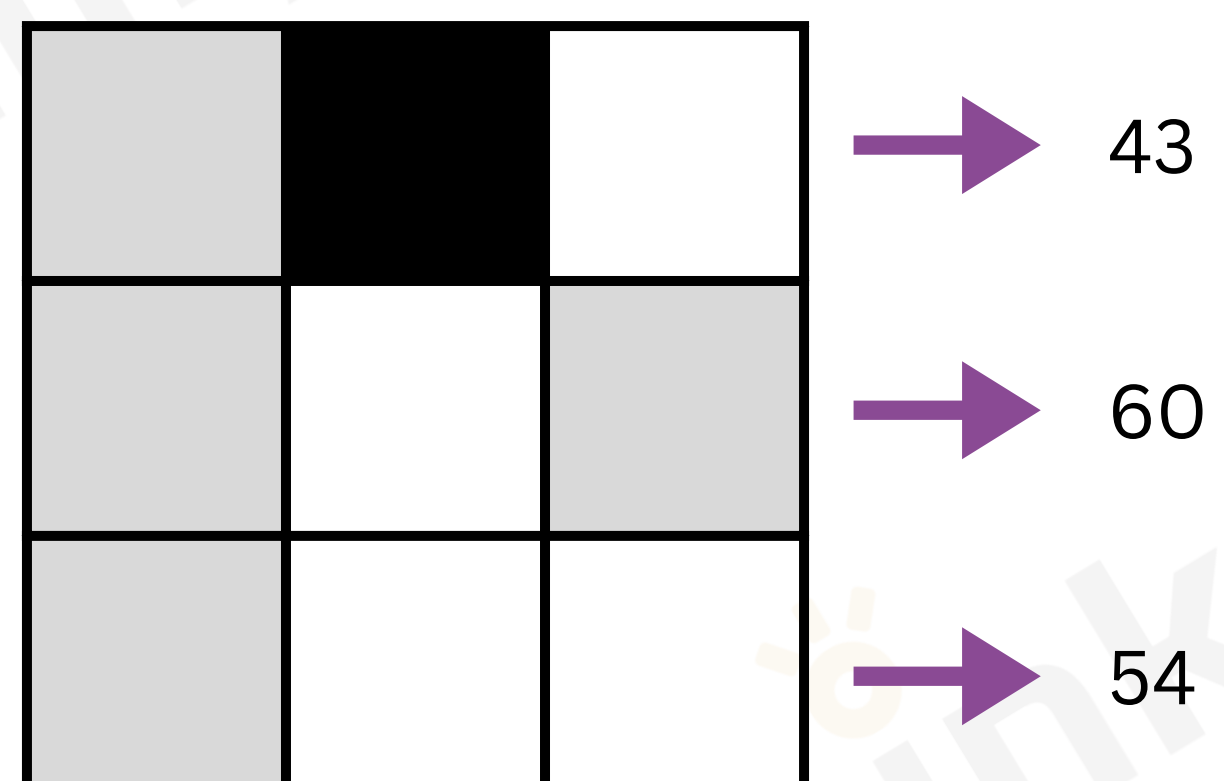


- A. 6 B. 5 C. 4 D. 8 E. 7

2. A box has fewer than 50 cookies in it. The cookies can be divided evenly between 2, 3 or 9 children. However, they cannot be divided evenly between 7 children because 3 more cookies would be needed. How many cookies are there in the box?

- A. 9 B. 18 C. 24 D. 36 E. 48

3. In the grid, the same number is hidden under the same color square. To the right of each row, the sum of numbers hidden under the squares in that row is given. Which number is hidden under the white square?



- A. 5 B. 8 C. 11
D. 16 E. 22

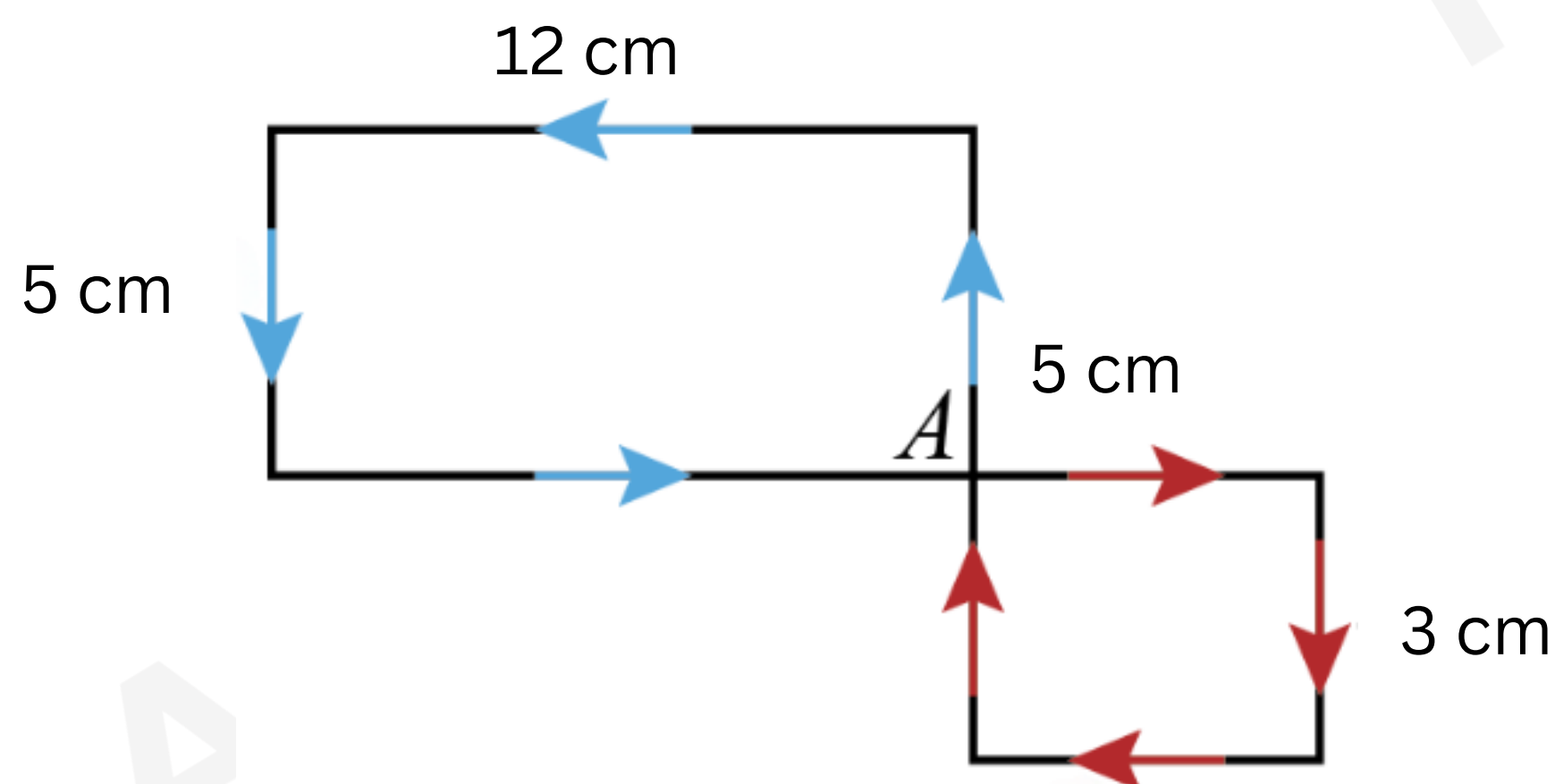
4. Find the least common multiple of each pair of numbers.

(1) 5 and 15

(2) 7 and 9

(3) 14 and 16

5. There are two ants, Annie and Andy. They start moving from point A with the same speed, in the directions shown. Annie moves along the blue arrows, and Andy moves along the red arrows. They meet again at A. What is the smallest number of laps that Annie needs to meet Andy at point A?



A. 8

B. 9

C. 10

D. 11

E. 12



**CONGRATULATIONS!
YOU FINISHED WEEK 3!**

Answers

Fun Calculation - Day 1

EBACD

Divisibility - Day 2

BECEA

Operation without Numbers - Day 3

BAAAD

Least Common Multiple - Day 4

[16, 12, 60]CDAB

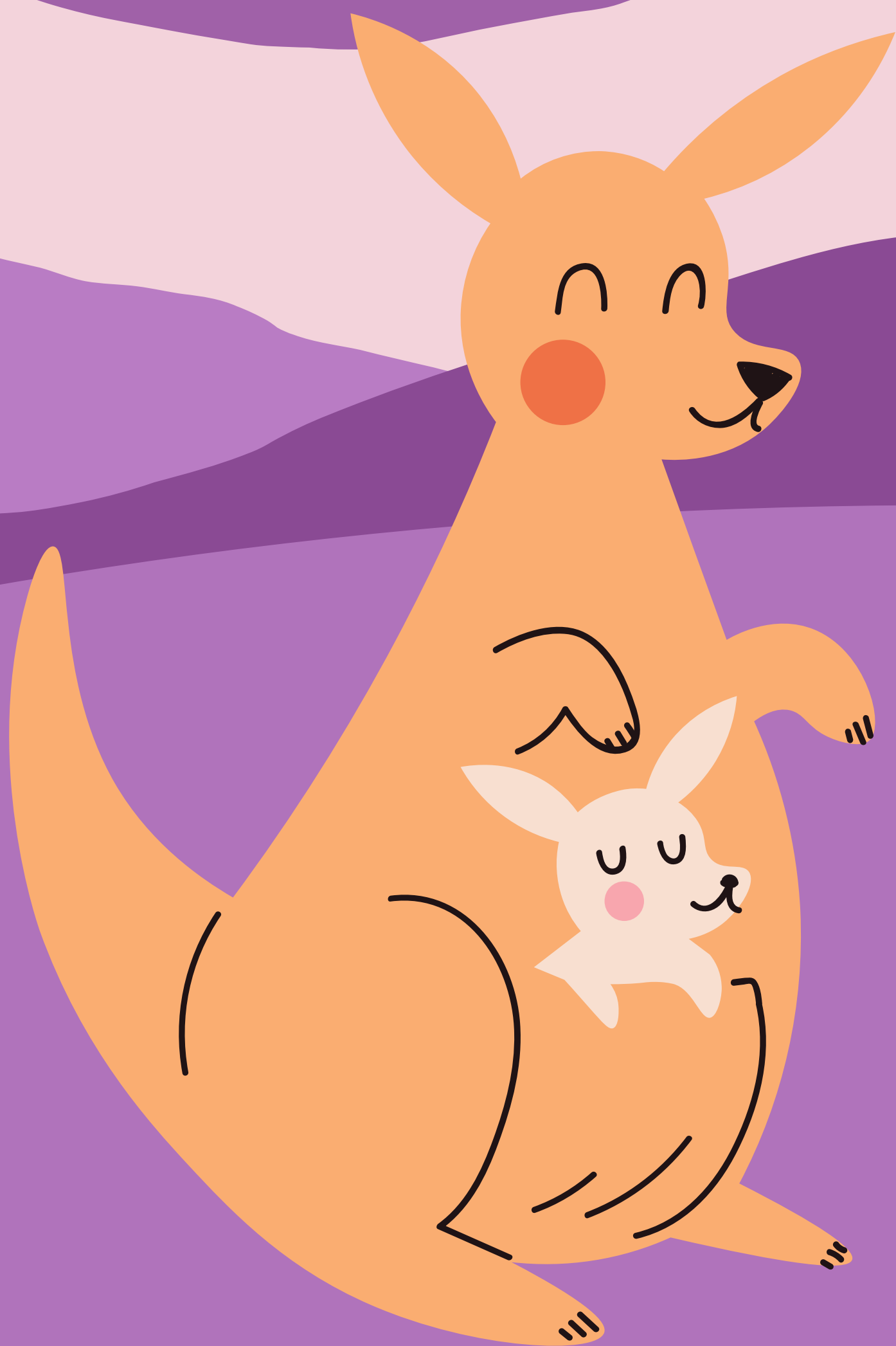
Week Review - Day 5

ABD[15, 63, 112]A

MK 5-POINTERS WORKBOOK

LV3-4

Geometry

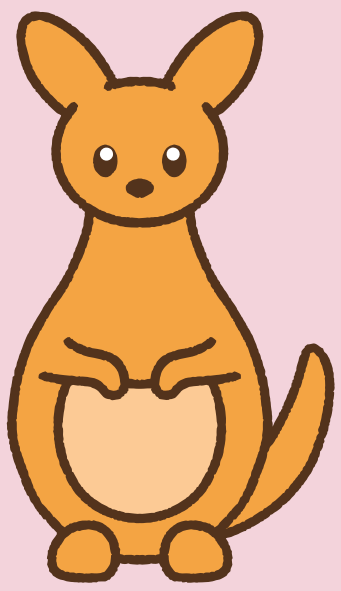


Scan to add MK Expert

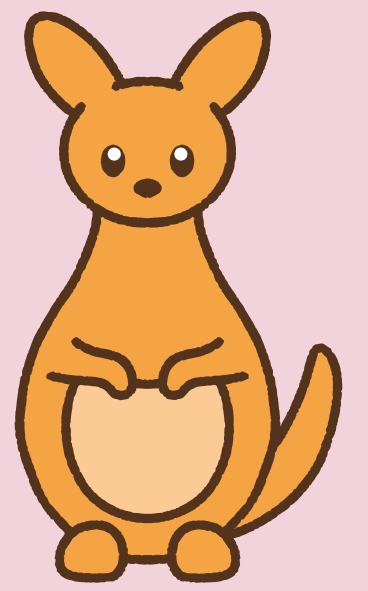


WeChat

WhatsApp

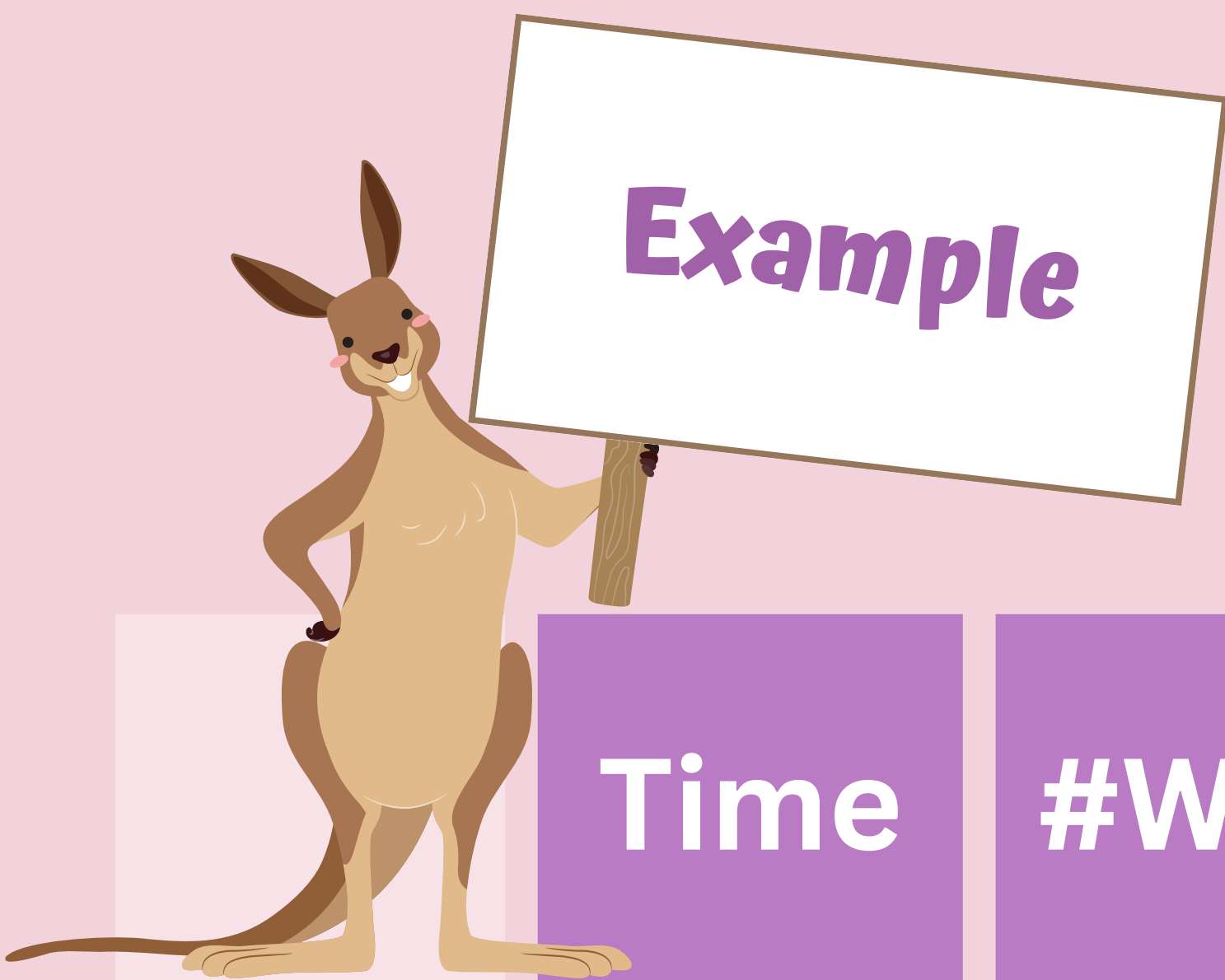


WORKBOOK GUIDELINE



In the following week, you can use this workbook to understand this module better. If you make a mistake, please review your class notes or watch the playback!

- Each week will cover one topic
- Record your time and accuracy on the tracker
- Use stickers or stamps to record your progress

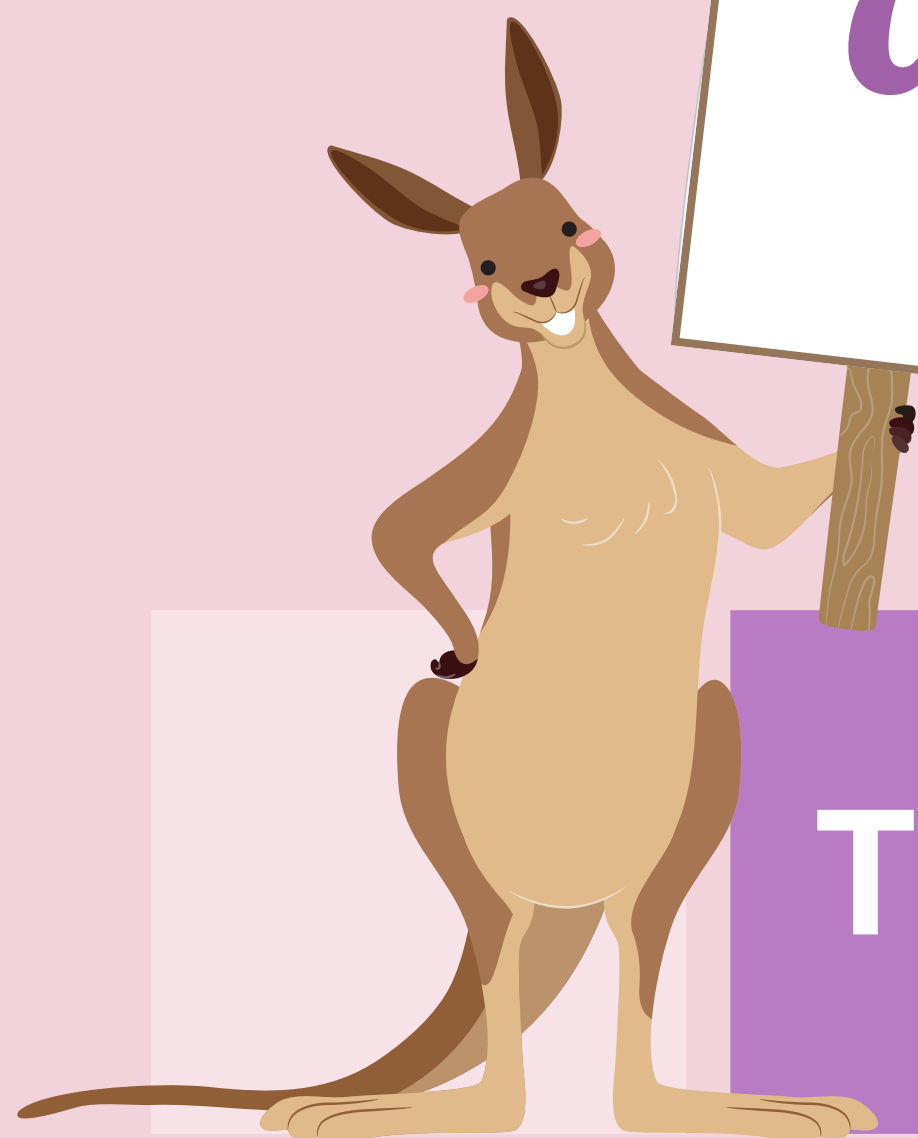


WEEK 0

	Time	#Wrong	Difficulty ★ ★ ★
Mon	30 min	2	★ ★ ★

Geometry

WEEK 4



Time

#Wrong

Difficulty



Mon

Tue

Wed

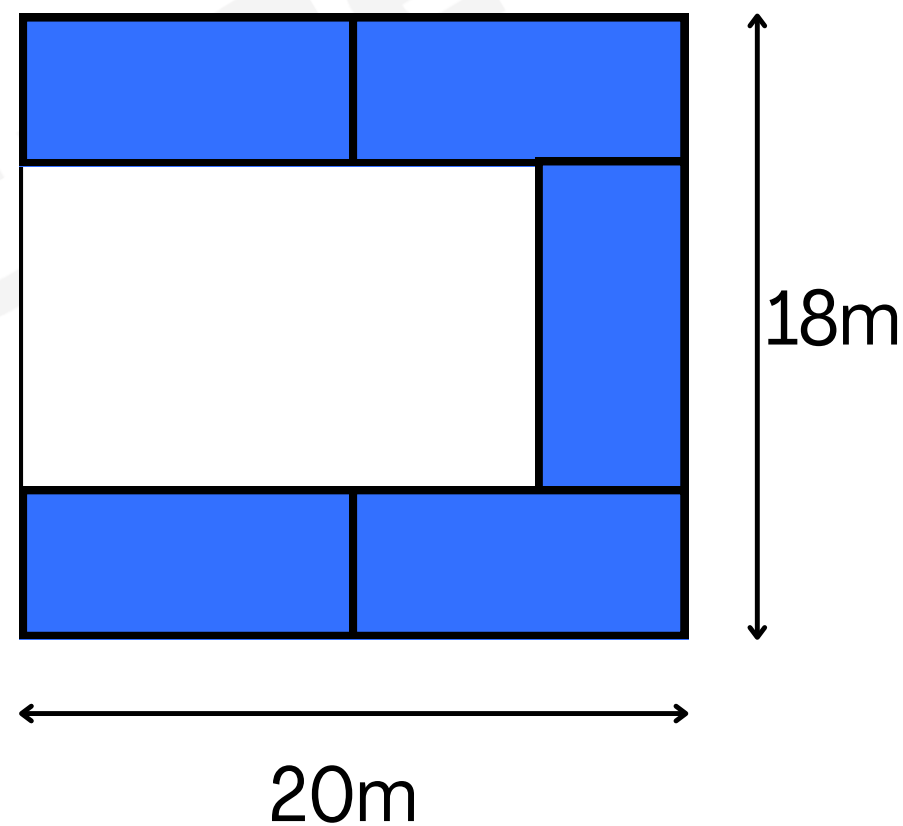
Thu

Fri

Perimeter

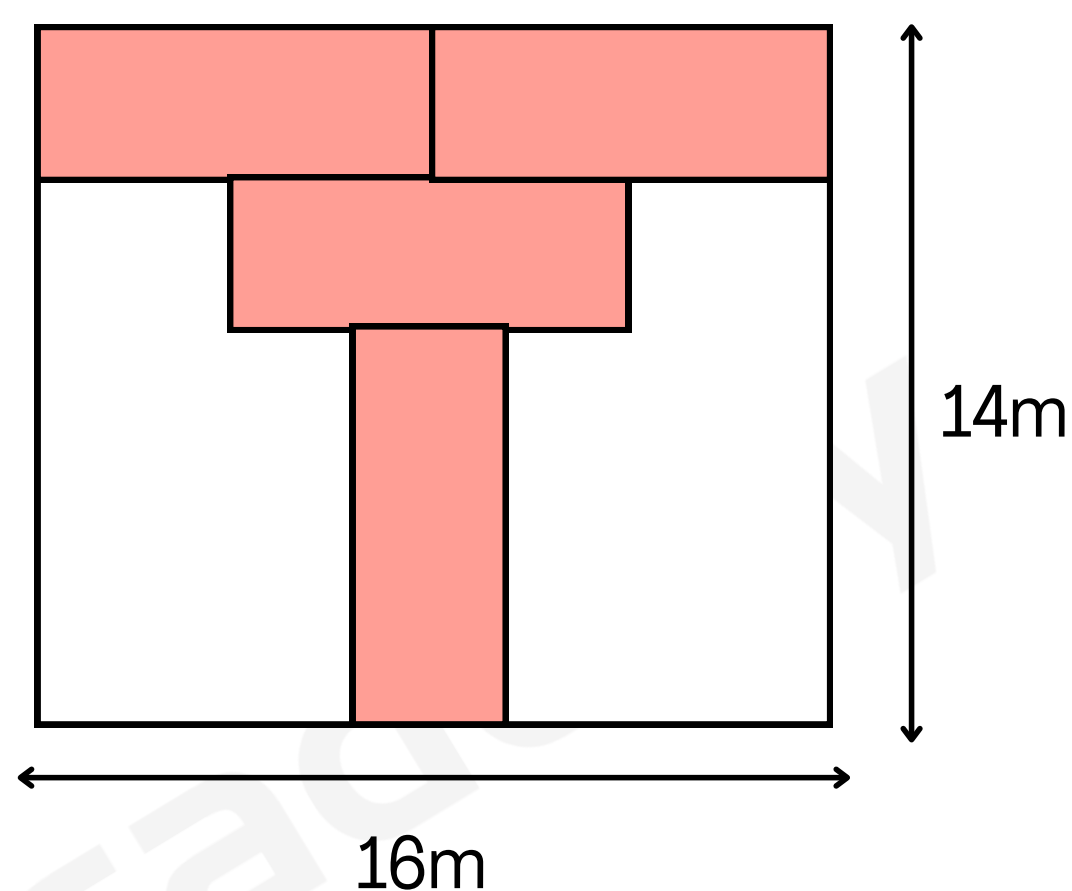
Day 1

1. The figure shows a rectangular garden with dimensions of 20 m by 18 m. The gardener has planted 5 identical flowerbeds (colored blue in the diagram). What is the perimeter of each of the flowerbeds?



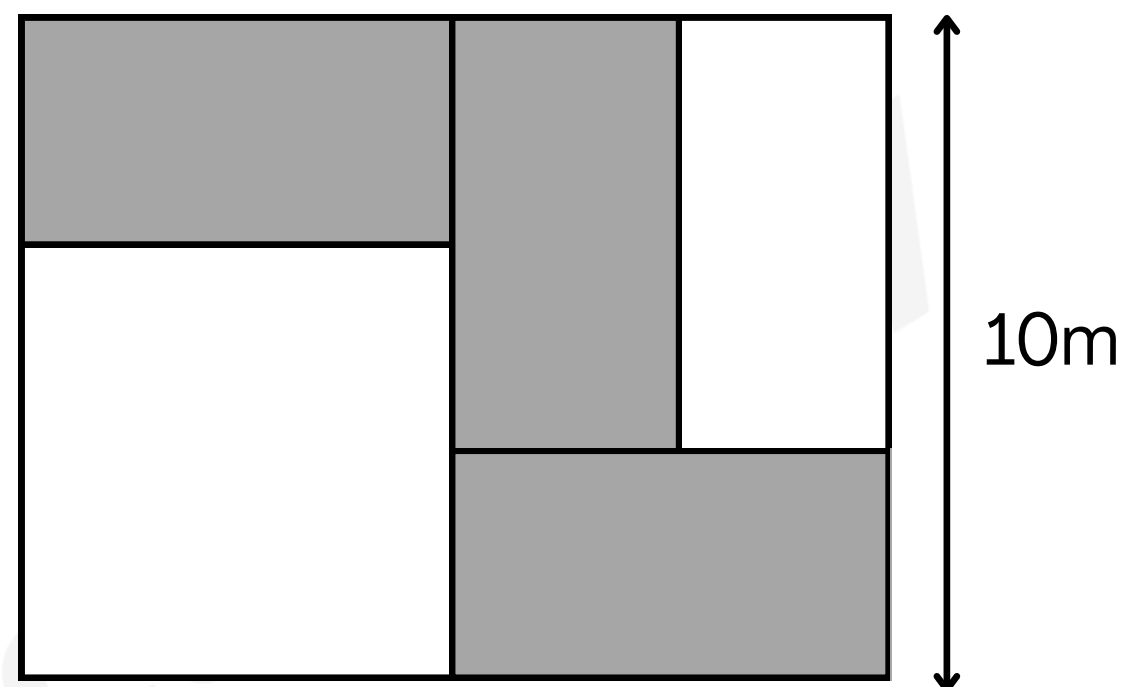
- A. 20m B. 24m C. 26m D. 28m E. 30m

2. The figure shows a rectangular garden with dimensions of 16 m by 14 m. The gardener has planted 4 identical flowerbeds (colored pink in the diagram). What is the perimeter of each of the flowerbeds?



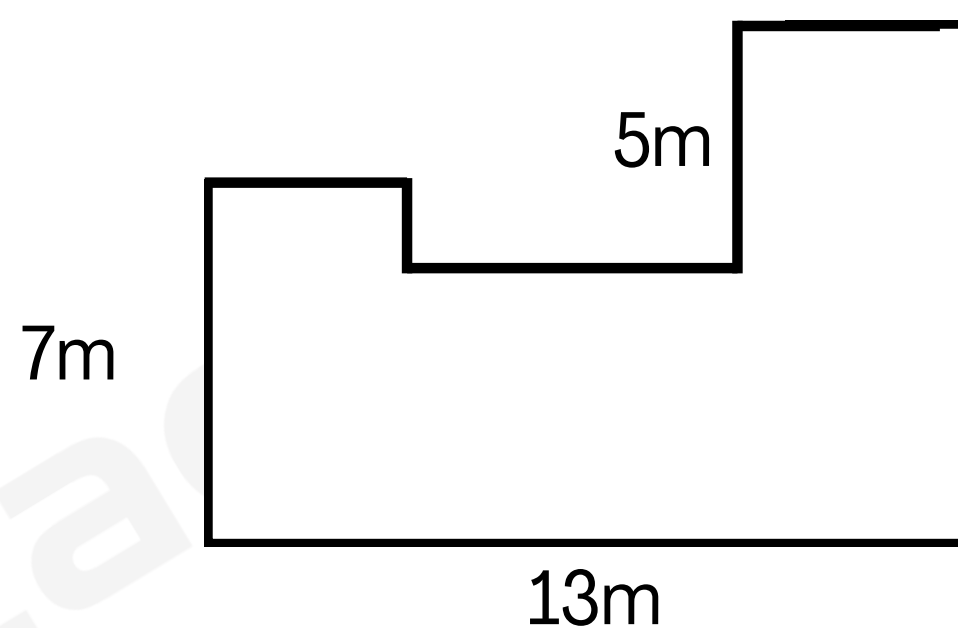
- A. 20m B. 22m C. 24m D. 26m E. 28m

3. The figure shows a rectangular garden with the width of 10m. The gardener has planted 3 identical flowerbeds (colored grey in the diagram). What is the perimeter of each of the flowerbeds?



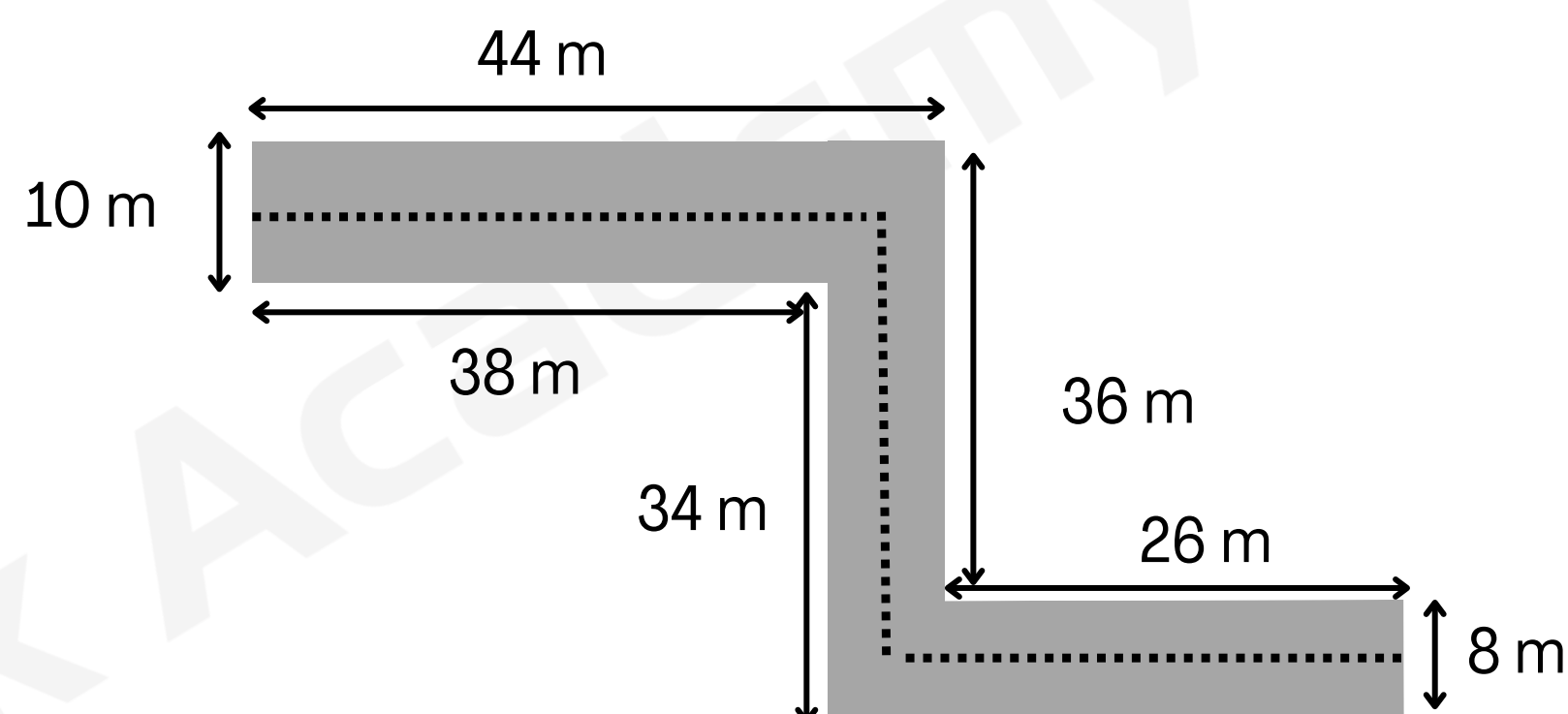
- A. 10m B. 16m C. 20m D. 22m E. 24m

4. The figure shows a garden. A cat walks along the edge of the garden for one whole circle. How many meters does the cat walk?



- A. 40m B. 44m C. 48m D. 50m E. Impossible to know

5. A hallway has the dimensions shown in the picture. A dog walks on the dashed line along the middle of the hallway. How many meters does the dog walk?

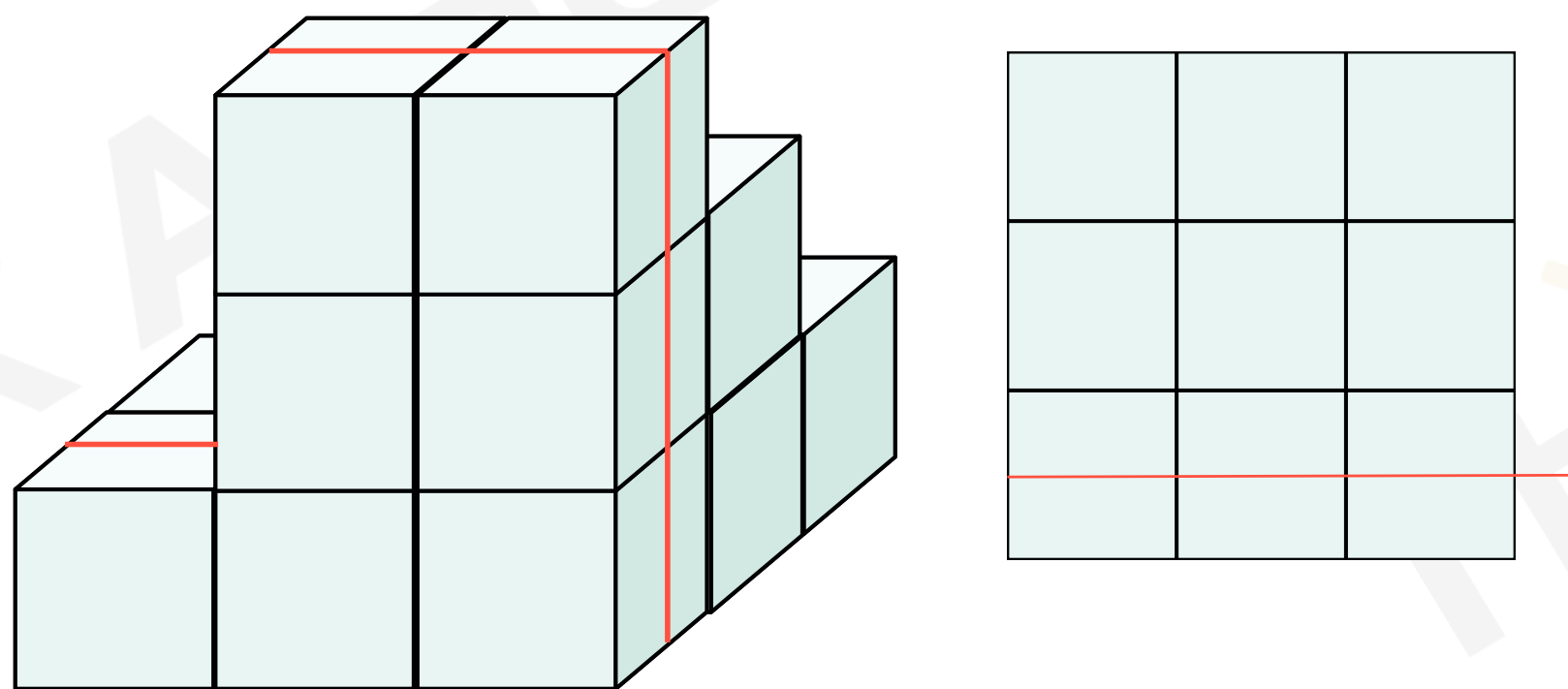


- A. 105m B. 110m C. 114m D. 116m E. 118m

3D Perimeter

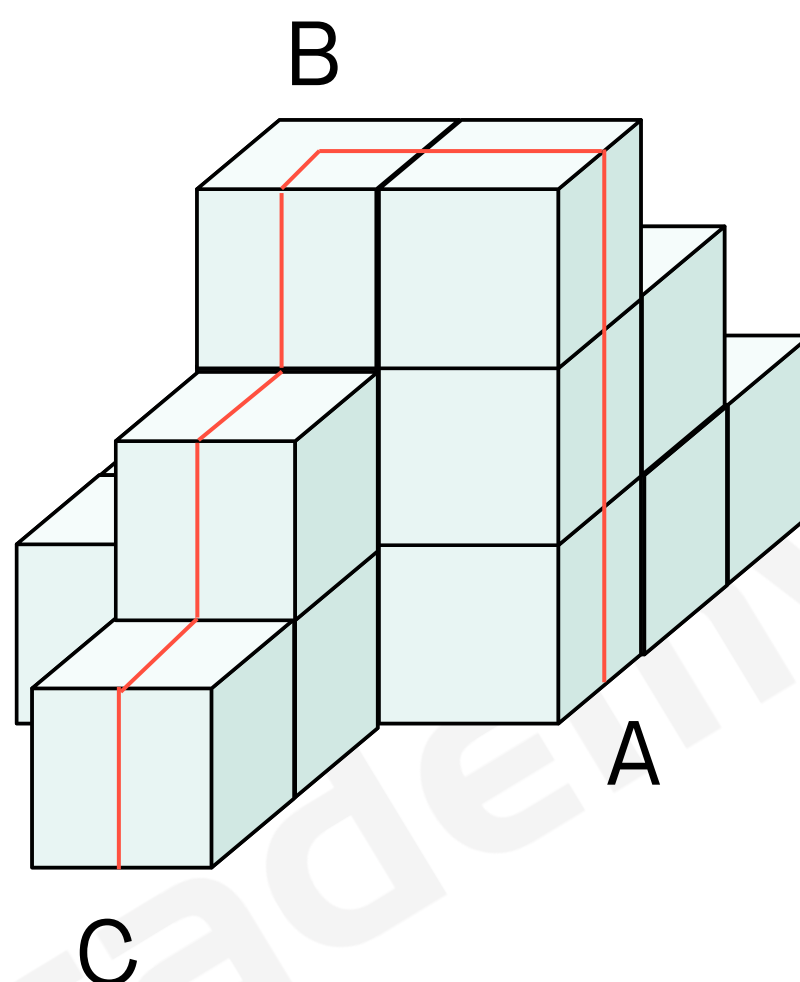
Day 2

1. A solid shape is built out of cubes. Each cube has a side length of 10 cm. An ant climbed up and over the shape, as shown by the red line. The right figure shows the top view of the shape. What is the length of the red path the ant walked?



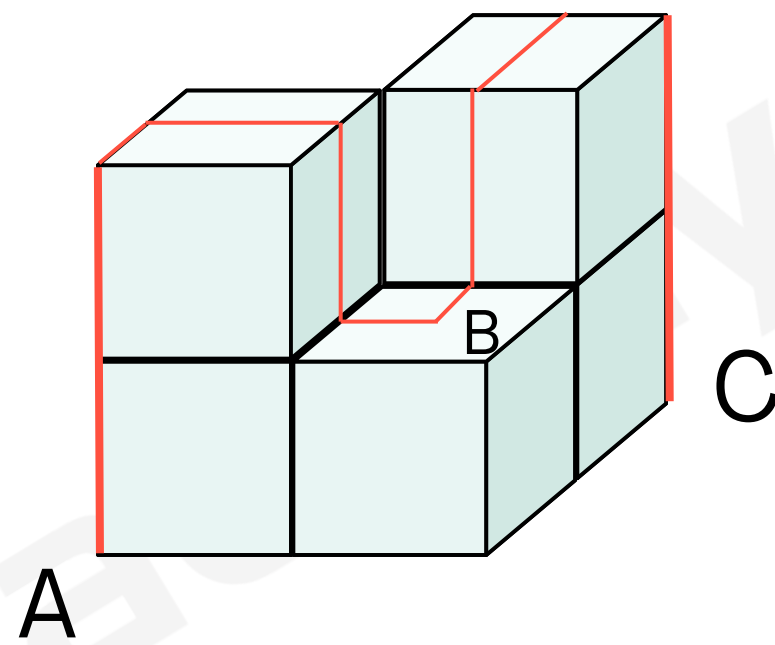
- A. 40cm B. 60cm C. 80cm D. 90cm E. 120cm

2. A solid shape is built out of cubes. Each cube has a side length of 10 cm. An ant climbed up from point A and over the shape to point C, as shown by the red line. Point B is the center point of that face. What is the length of the red path the ant walked?



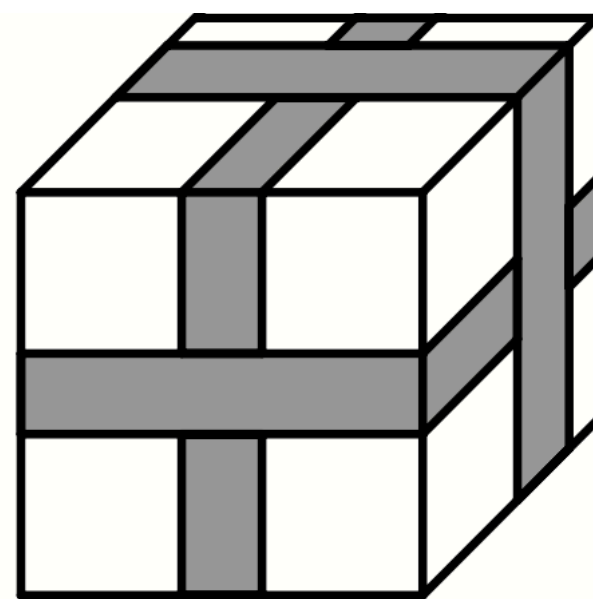
- A. 80cm B. 90cm C. 100cm D. 110cm E. 120cm

3. A solid shape is built out of cubes. Each cube has a side length of 10 cm. An ant climbed up from point A and over the shape to point C, as shown by the red line. Point B is the center point of that face. What is the length of the red path the ant walked?



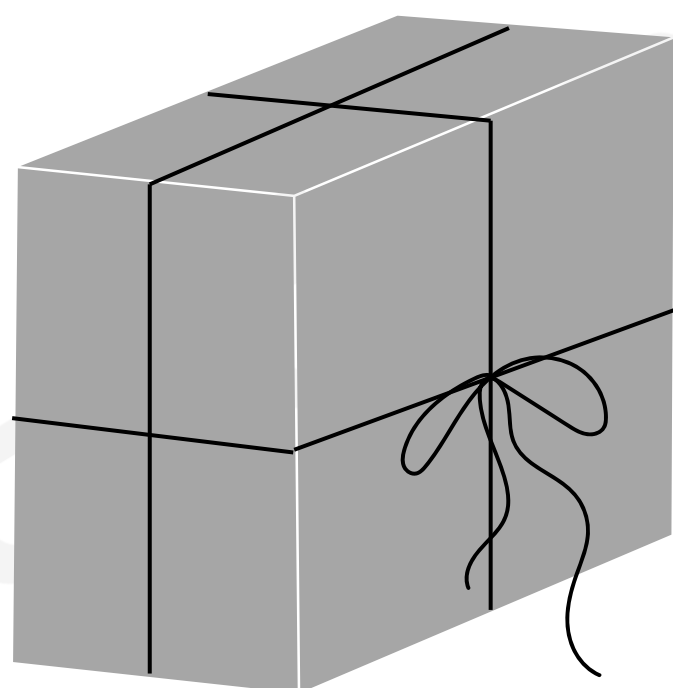
- A. 80cm B. 90cm C. 100cm D. 110cm E. 120cm

4. Robert's birthday present is placed in a box with dimensions of 10cm x 10cm x 10cm and wrapped with a ribbon as shown in the picture. What is the length of the ribbon?



- A. 80cm B. 90cm C. 100cm D. 110cm E. 120cm

5. Bob's birthday present is placed in a box with dimensions of 10 cm x 20 cm x 20 cm and wrapped with a piece of the string as shown in the picture. The ribbon part is 20 cm long. What is the length of the string in total?

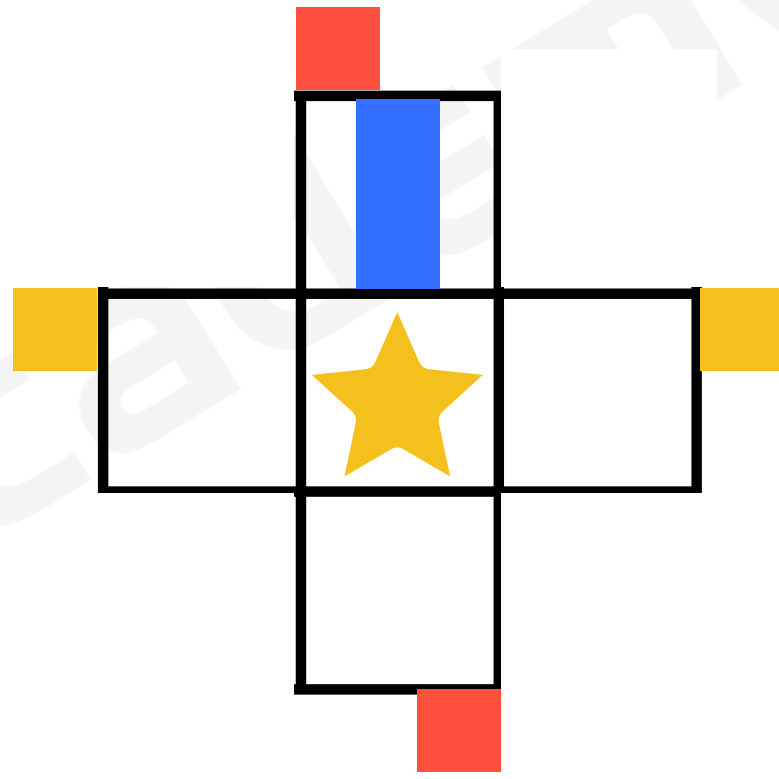


- A. 140cm B. 180cm C. 200cm D. 220cm E. 240cm

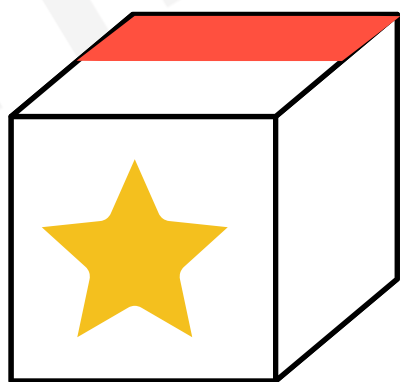
Dice

Day 3 & Day 4

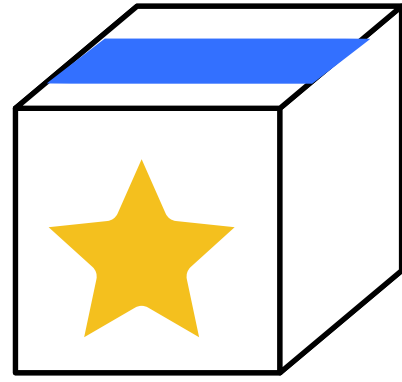
1. Which of the cubes has the plan shown in the picture below?



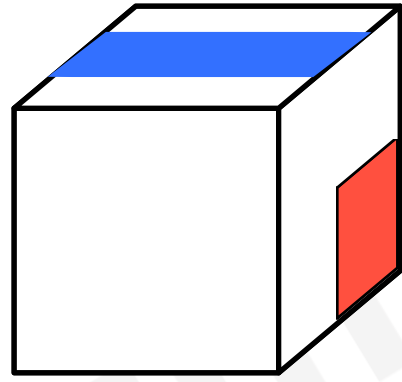
A.



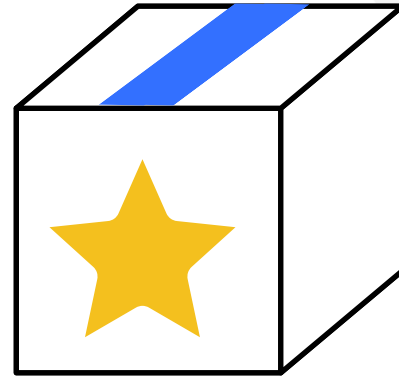
B.



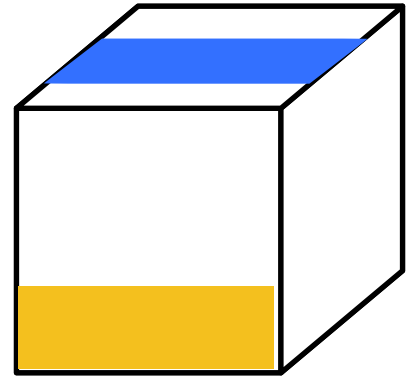
C.



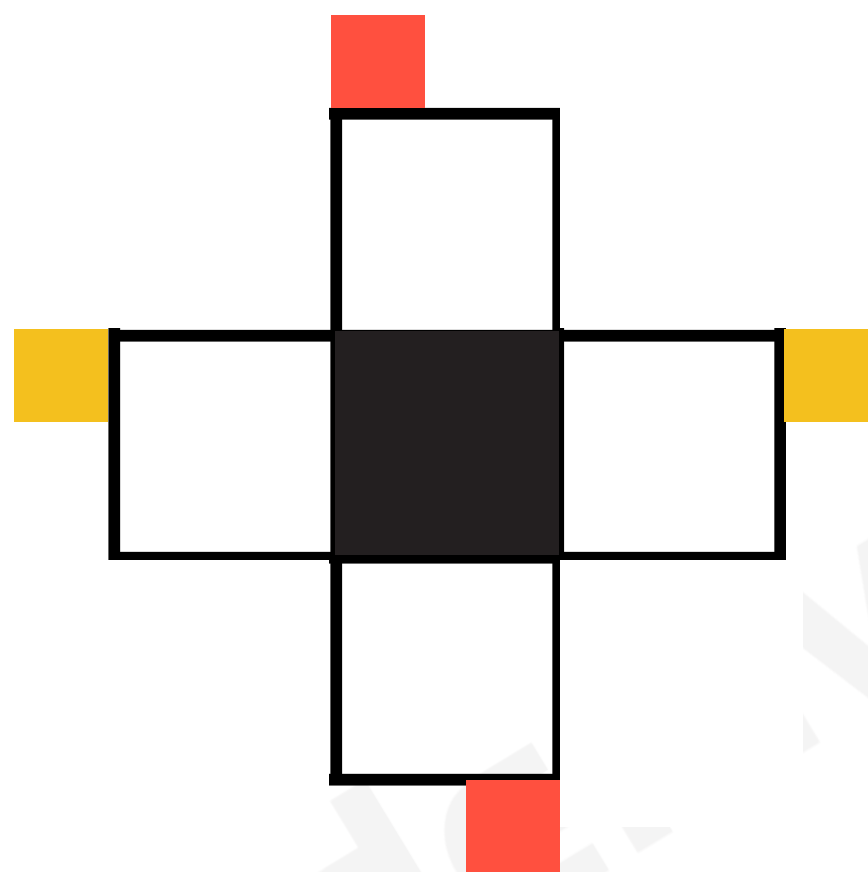
D.



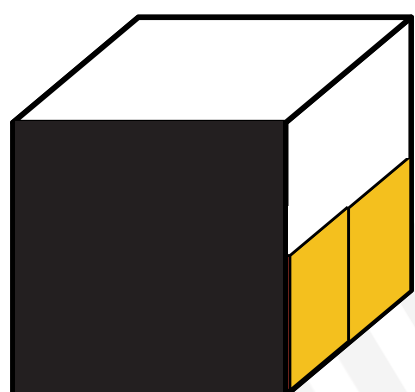
E.



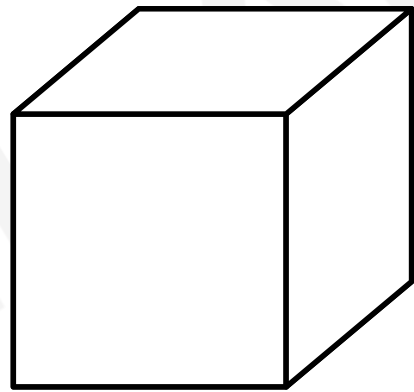
2. Which of the cubes has the plan shown in the picture below?



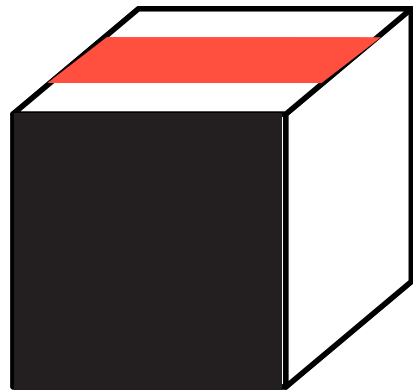
A.



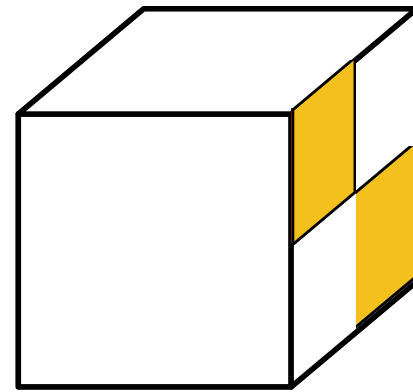
B.



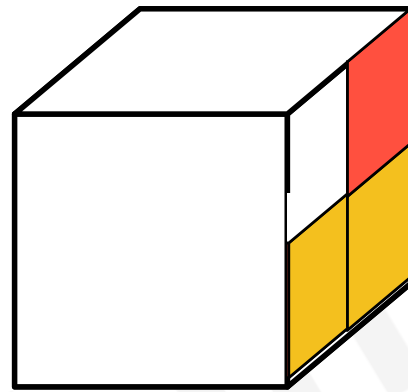
C.



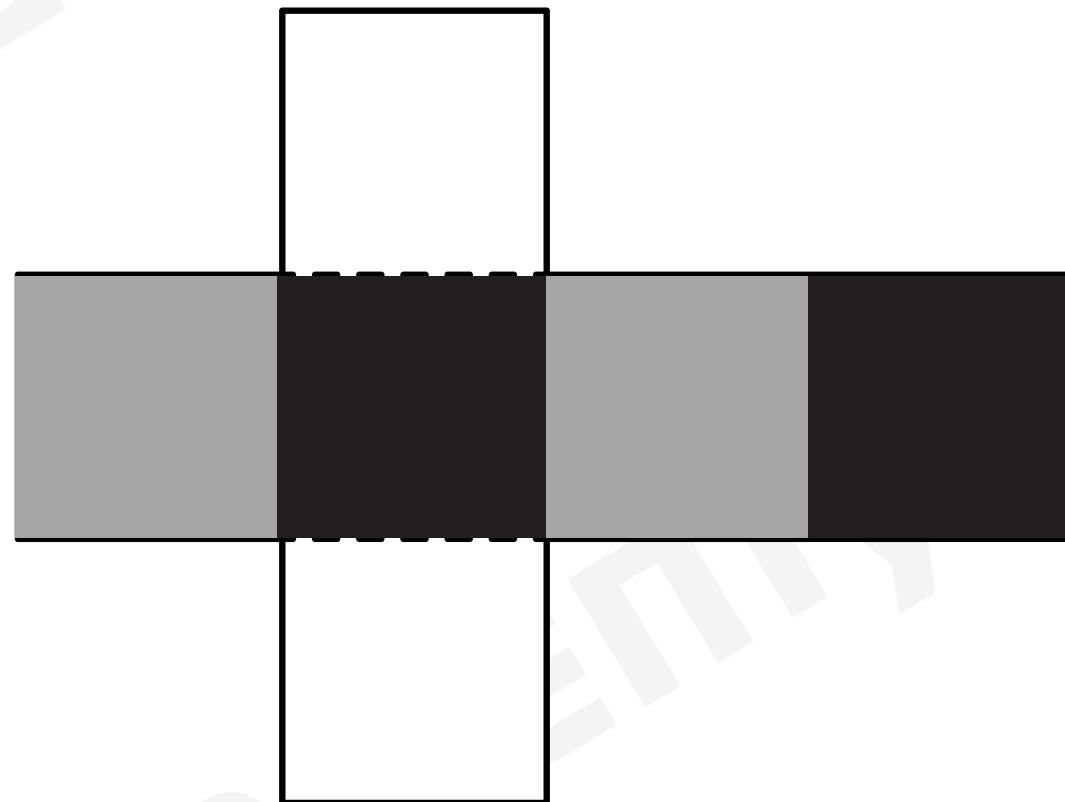
D.



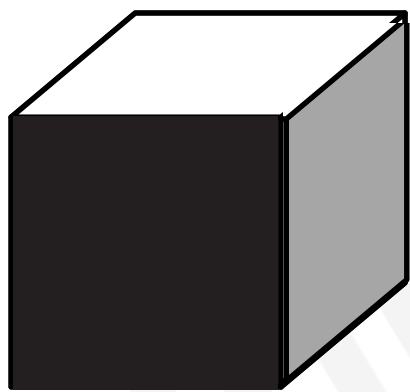
E.



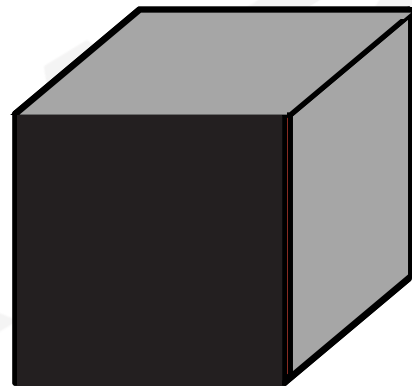
3. Which of the cubes has the plan shown in the picture below?



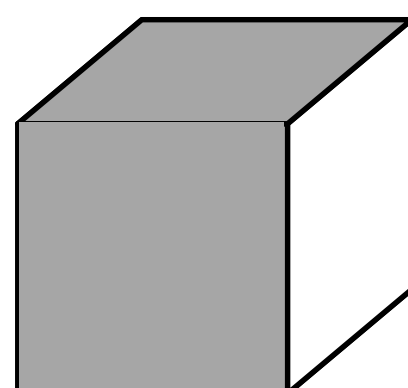
A.



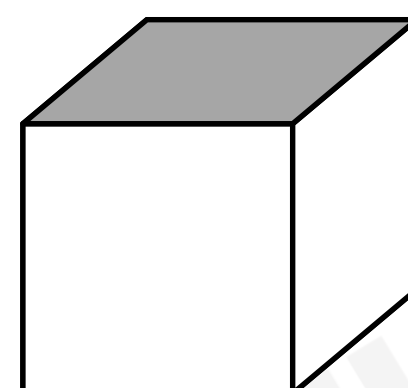
B.



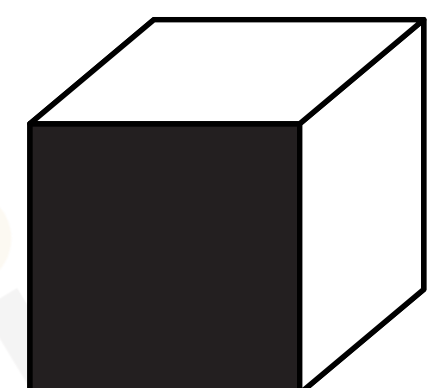
C.



D.

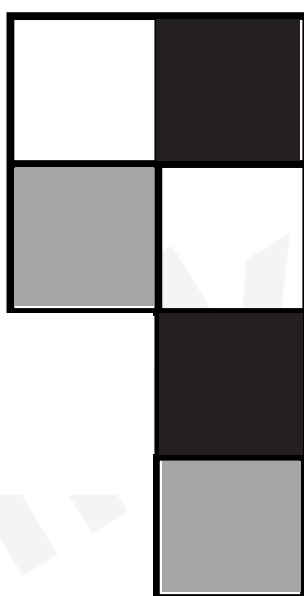


E.

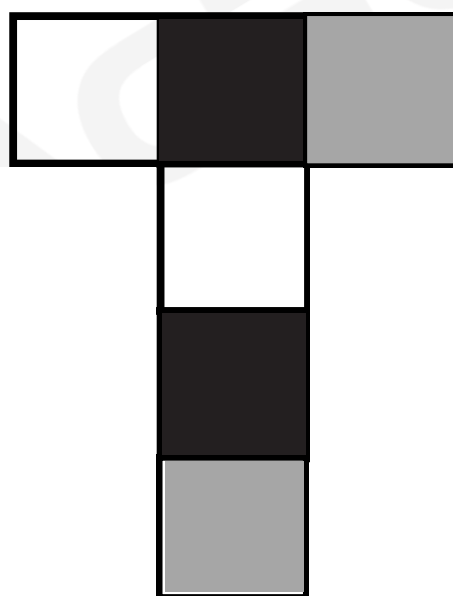


4. A certain cube is painted with three colors so that every side of this cube is one of the colors and the opposite sides are the same color. From which of the patterns below can this kind of cube be made?

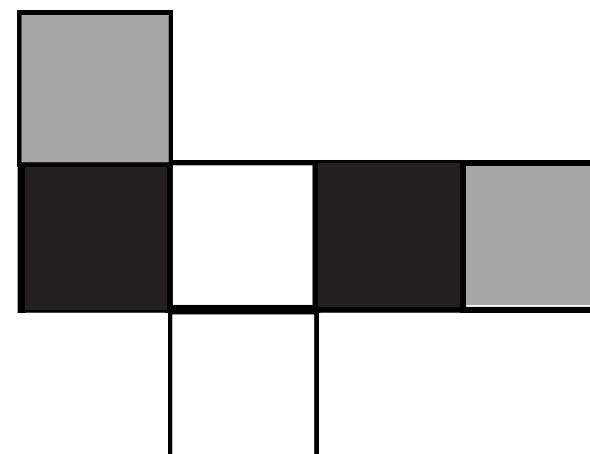
A.



B.



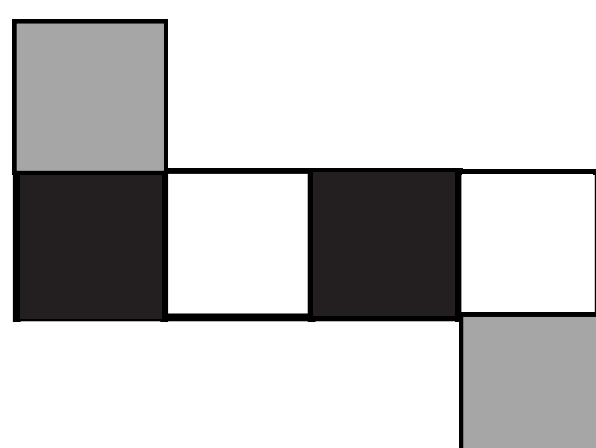
C.



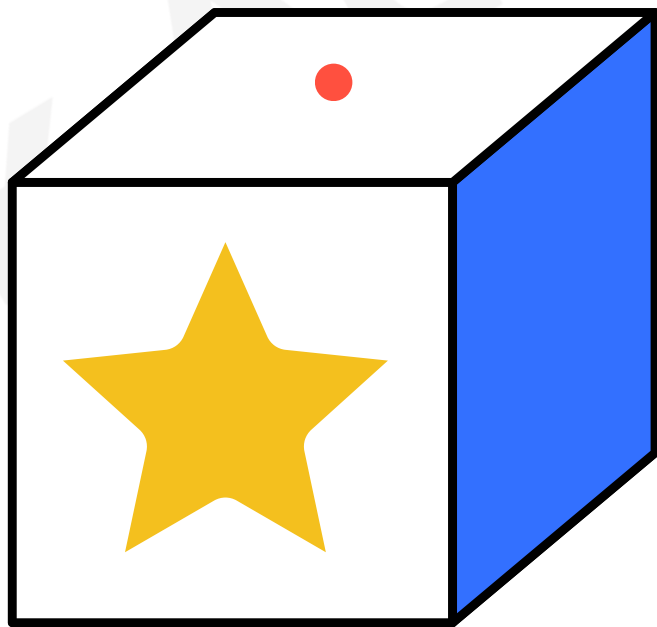
D.



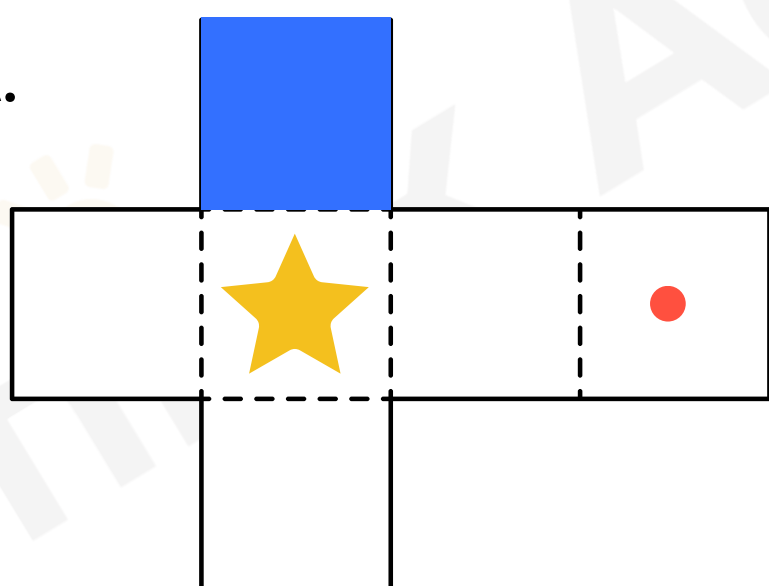
E.



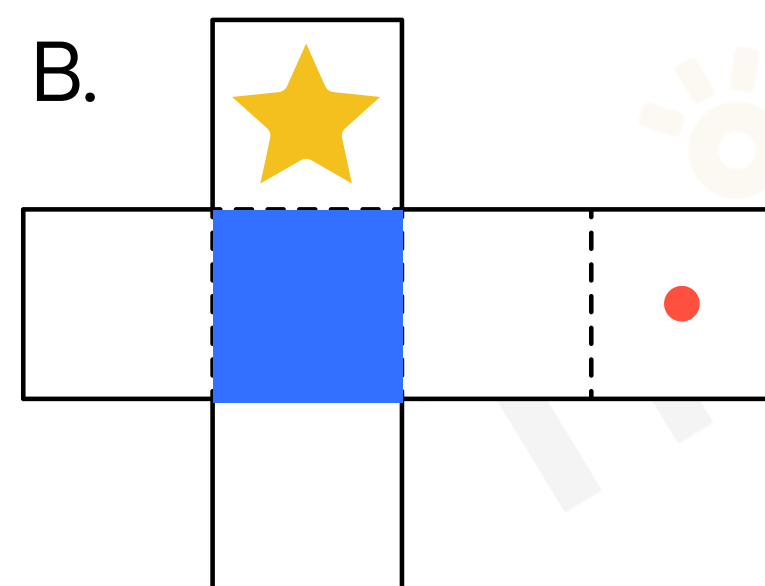
5. There is a cube as shown below. It has a square, a dot, and a star on three faces of the cube. Which of the followings could be the net of the cube?



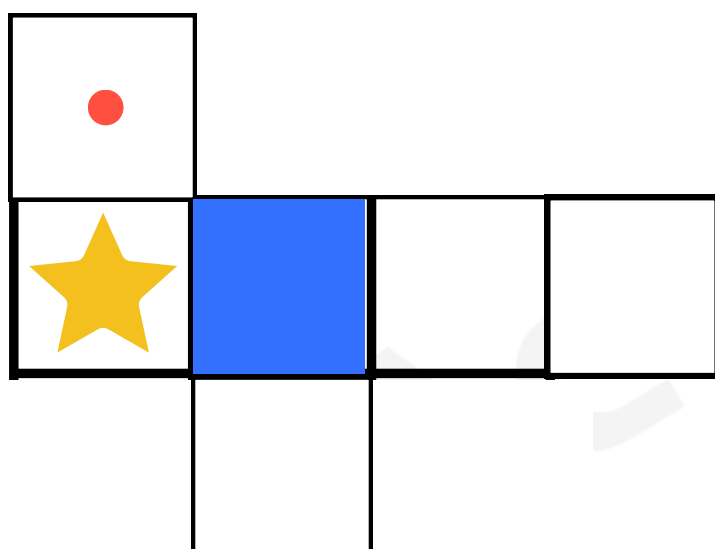
A.



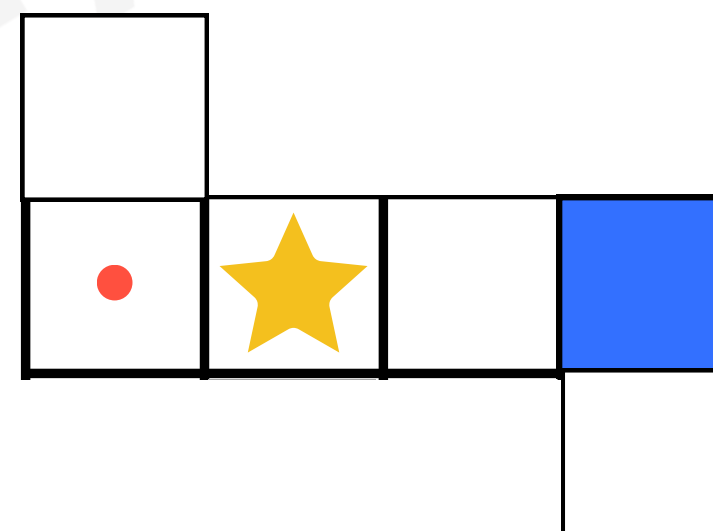
B.



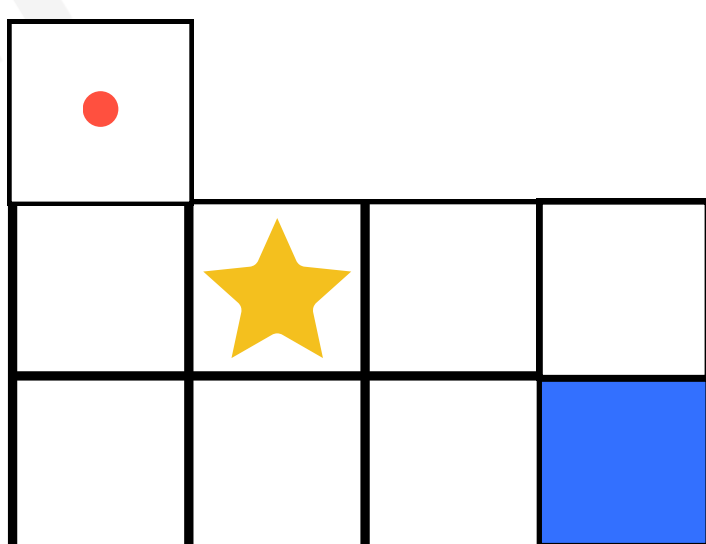
C.



D.



E.



Take a rest!

6. The sum of dots on the opposite faces of a die is 7. We move a die on a grid as the picture shown. The die is rotated once for each square when it is moved as the arrow shows. When the die stops in the square with the question mark, the number of dots on the top is?



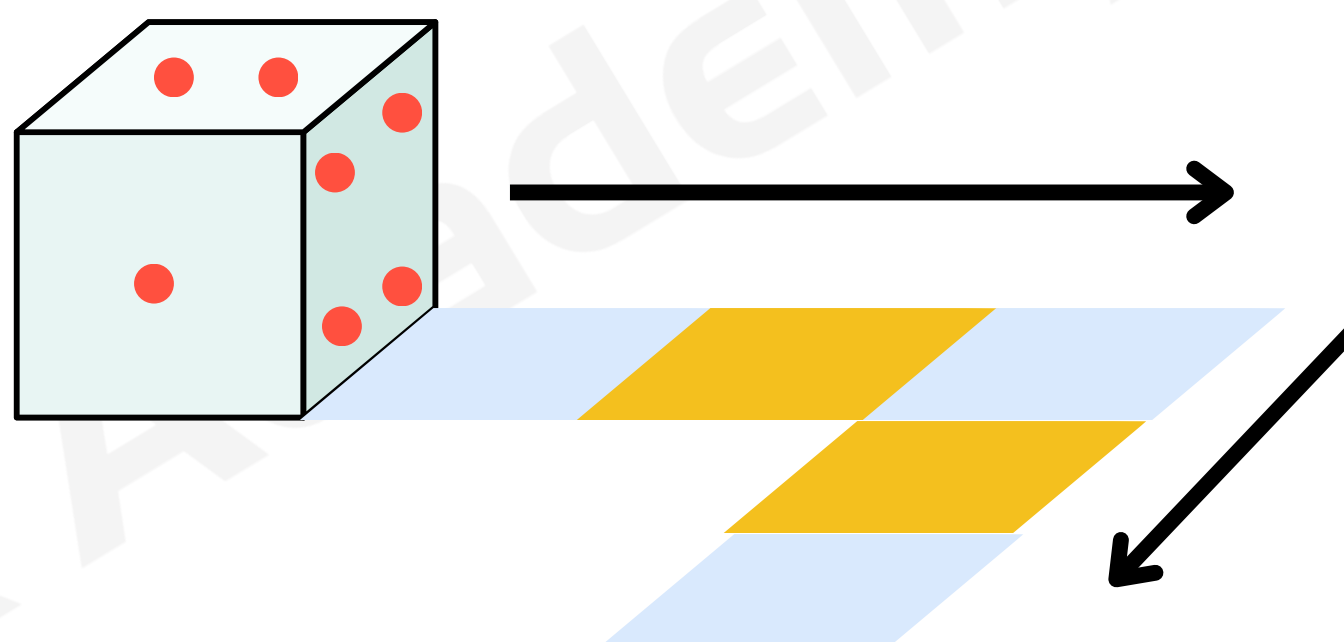
- A. 1 B. 2 C. 3 D. 5 E. 6

7. The sum of dots on the opposite faces of a die is 7. We move a die on a grid as the picture shown. The die is rotated once for each square when it is moved as the arrow shows. When the die stops in the square with the question mark, the number of dots on the top is?



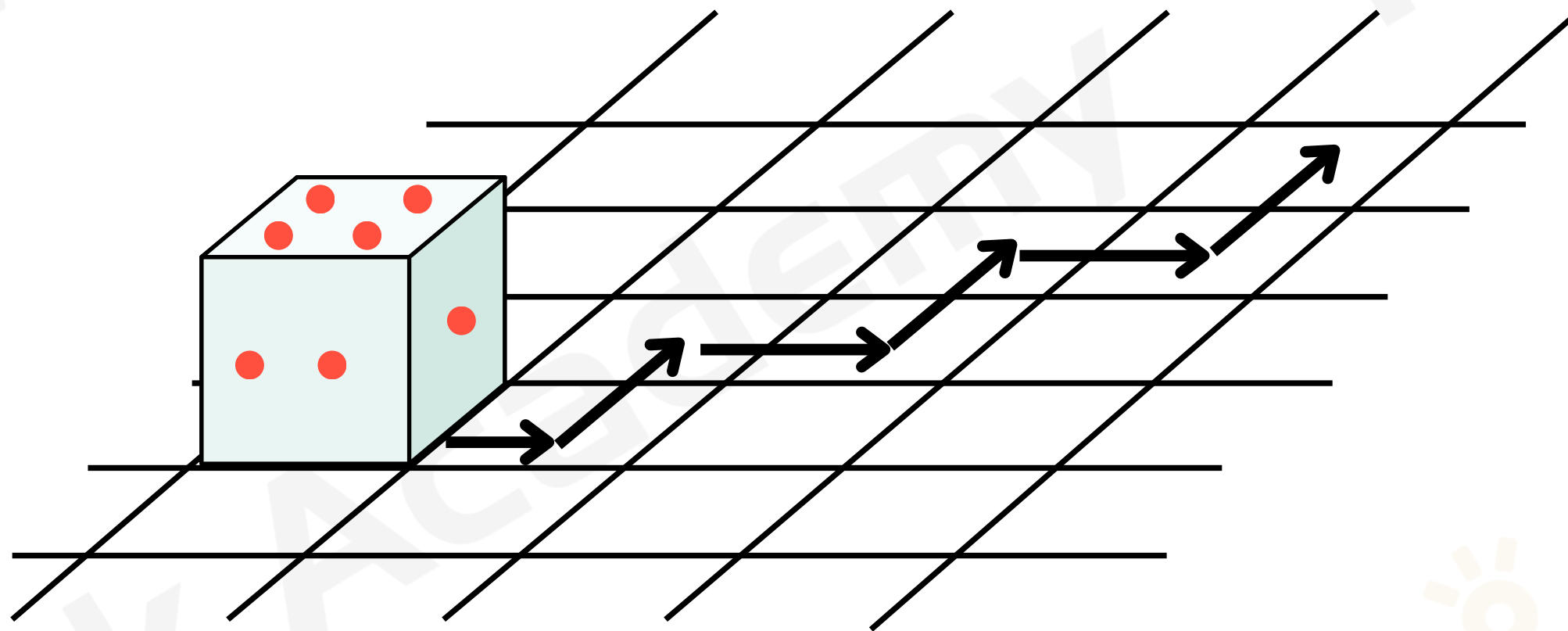
- A. 1 B. 2 C. 3 D. 5 E. 6

8. The sum of dots on the opposite faces of a die is 7. We move a die on a grid as the picture shown. The die is rotated once for each square when it is moved as the arrow shows. When the die stops in the square with the question mark, the sum of numbers of dots on all blank squares is (not including the initial bottom number)?



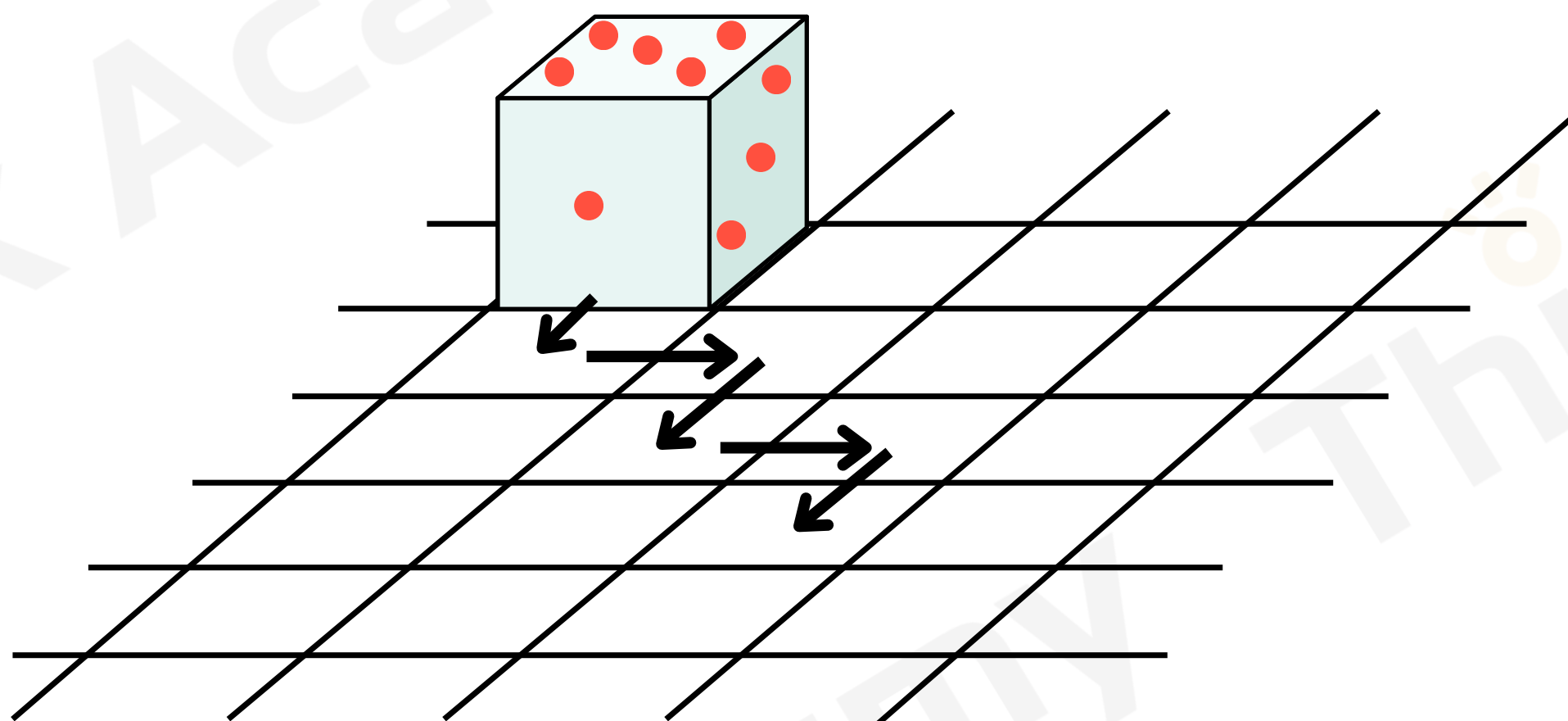
- A. 4 B. 12 C. 13 D. 14 E. 16

9. The sum of dots on the opposite faces of a die is 7. We move a die on a grid as the picture shown. The die is rotated once for each square when it is moved as the arrow shows. When the die stops in the square with the question mark, what is the number of dots on the top?



- A. 1 B. 2 C. 3 D. 4 E. 5

10. The sum of dots on the opposite faces of a die is 7. We move a die on a grid as the picture shown. The die is rotated once for each square when it is moved as the arrow shows. When the die stops in the square with the question mark, the sum of numbers of dots on the way in total is (not including the initial top number)?

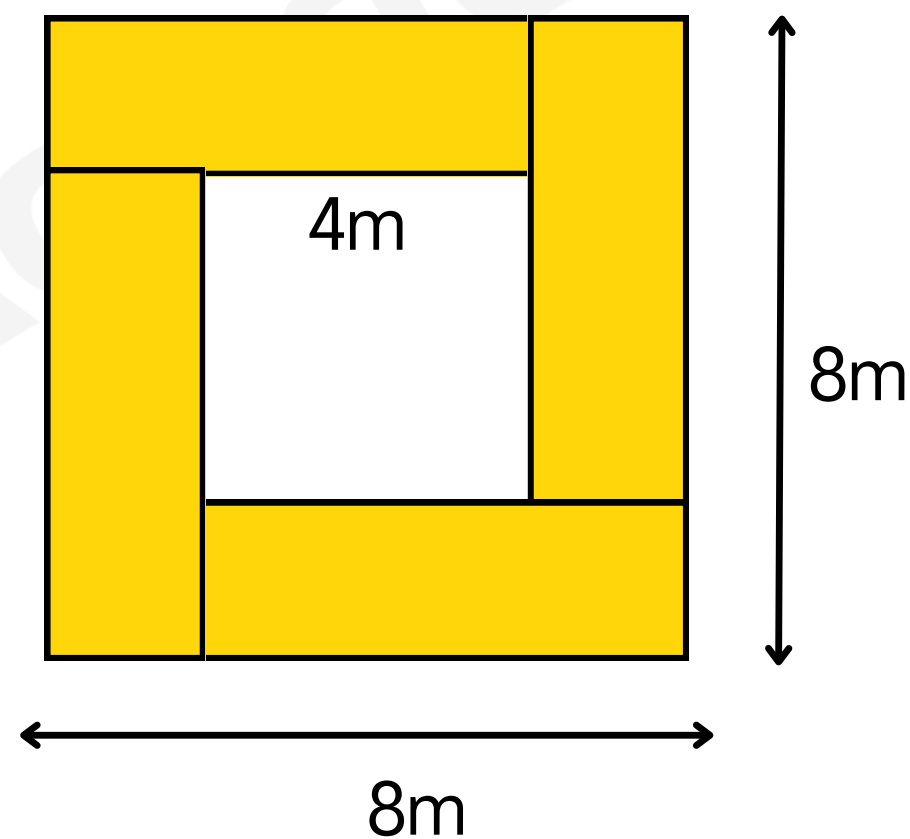


- A. 10 B. 13 C. 16 D. 18 E. 19

Review

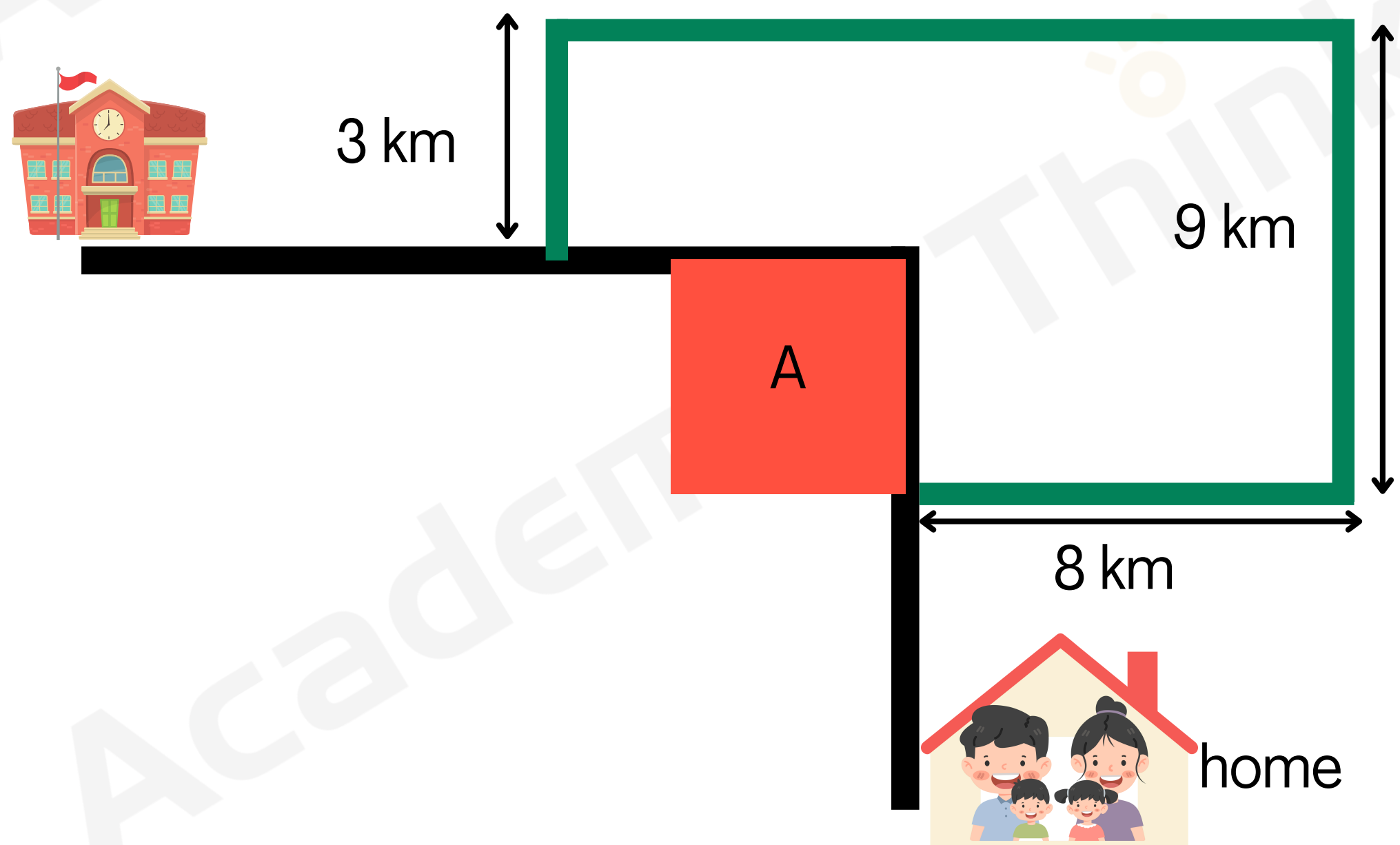
Day 5

1. The figure shows a square garden with dimensions of 8 m by 8 m. The gardener has planted 4 identical flowerbeds (colored yellow in the diagram). And the inner square garden has a side length of 4 m. What is the perimeter of 4 flowerbeds together?



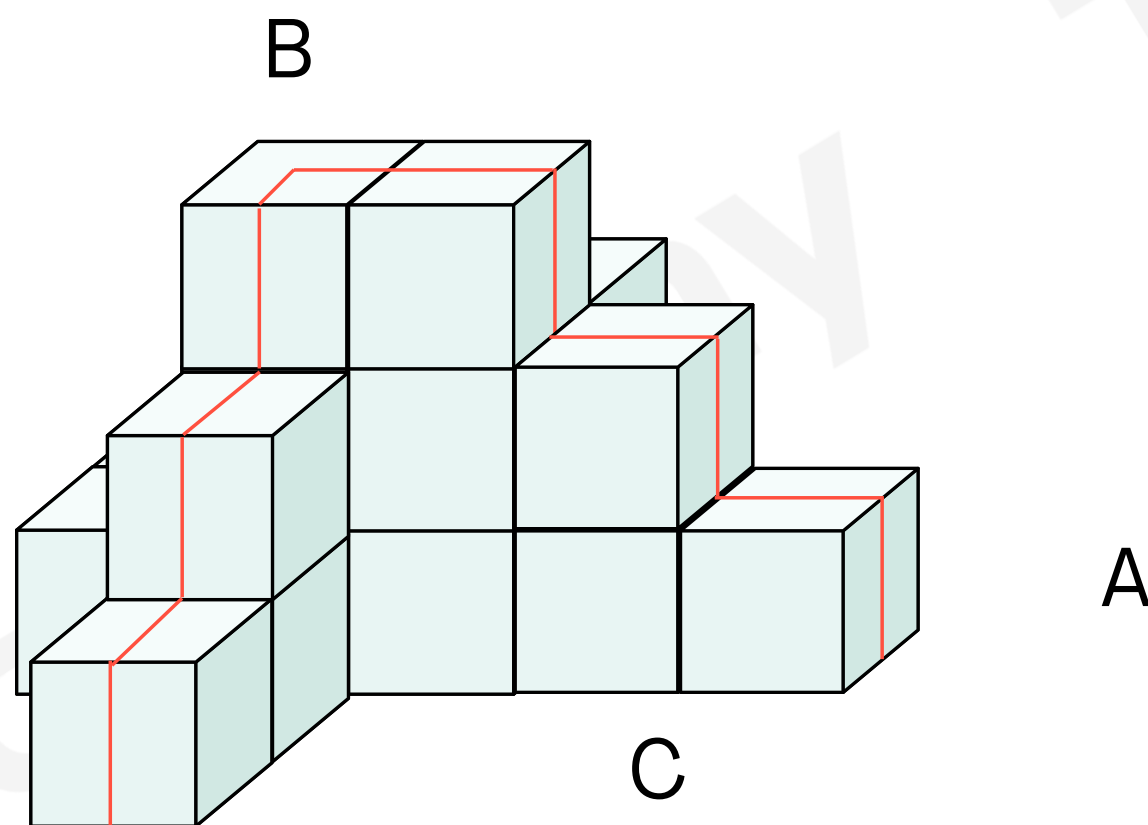
- A. 16m B. 24m C. 32m D. 48m E. 64m

2. Allison wants to go home from school along the black path. However, because of the construction at point A, Allison can only get home through the green path. Then how many more kilometers should Allison drive than her original plan?



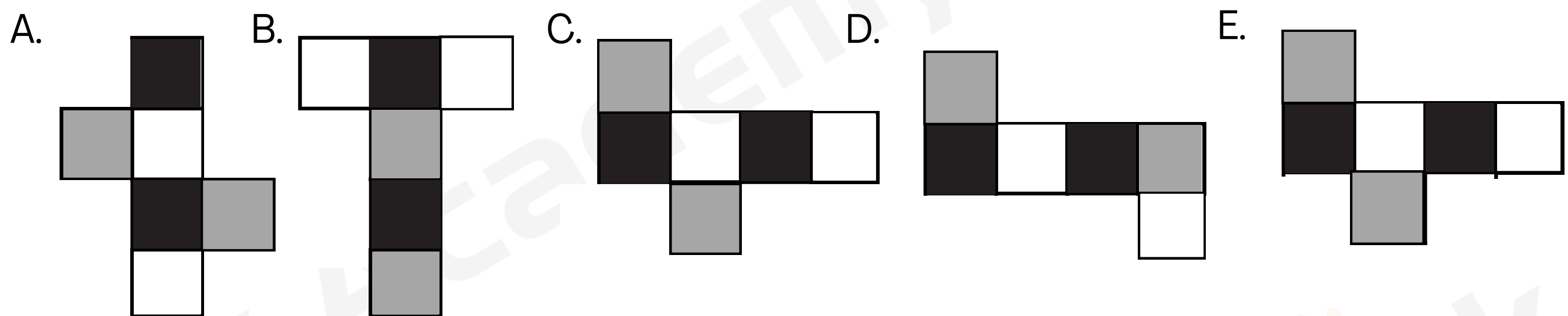
- A. 12km B. 24km C. 22km D. 18km E. 34km

3. A solid shape is built out of cubes. Each cube has a side length of 10 cm. An ant climbed up from point A and over the shape to point C, as shown by the red line. Point B is the center point of that face. What is the length of the red path the ant walked?

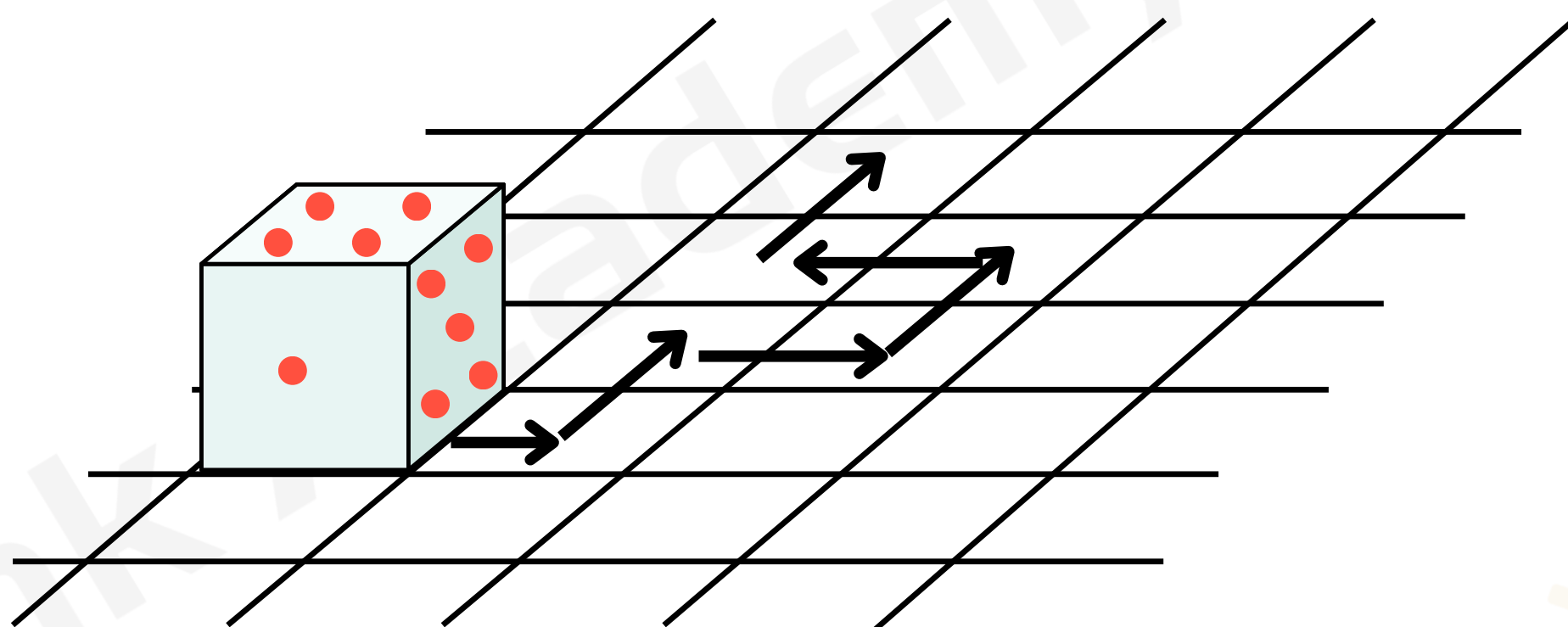


- A. 80cm B. 90cm C. 100cm D. 110cm E. 120cm

4. A certain cube is painted with three colors so that every side of this cube is one of the colors and the opposite sides are the same color. From which of the patterns below can't this kind of cube be made?



5. The sum of dots on the opposite faces of a die is 7. We move a die on a grid as the picture shown. The die is rotated once for each square when it is moved as the arrow shows. When the die stops in the square with the question mark, what is the number of dots on the bottom?





**CONGRATULATIONS!
YOU FINISHED WEEK 4!**

Answers

Perimeter - Day 1

DBCDA

3D Perimeter - Day 2

DCCED

Dice - Day 3&4

DEAEC AADDE

Week Review - Day 5

ECEDC