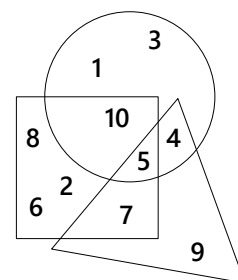


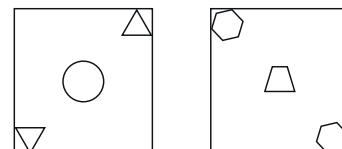
3 POINTS PROBLEMS

01. WHICH NUMBER IS INSIDE THE TRIANGLE, THE SQUARE AND THE CIRCLE?

- (A) 1 (C) 5 (E) 12
(B) 4 (D) 9



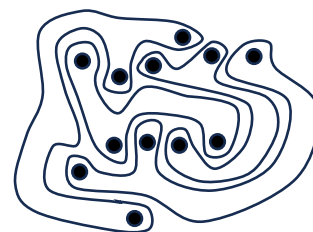
02. SOME SHAPES ARE PRINTED ON 2 PIECES OF GLASS. ANNA PLACES ONE ON TOP OF THE OTHER, WITHOUT TURNING EITHER PIECE. WHAT DOES SHE SEE?



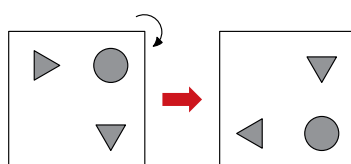
- (A) (B) (C) (D) (E)

03. THE PICTURE SHOWS 4 STRANGE SHAPES. HOW MANY SHAPES HAVE 3 DOTS INSIDE?

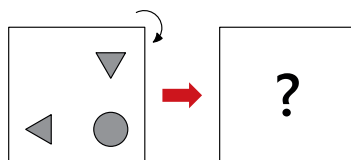
- (A) 0 (C) 2 (E) 4
(B) 1 (D) 3



04. KEVIN THE KANGAROO PUTS A PICTURE ON THE TABLE. HE ROTATES THE PICTURE THROUGH A QUARTER TURN, AS SHOWN.



HE THEN DOES THE SAME ROTATION AGAIN.

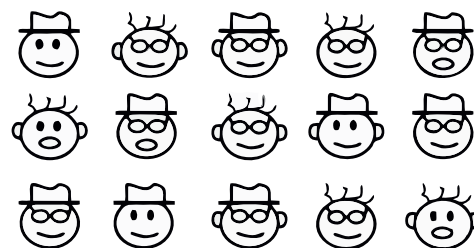


WHAT DOES KEVIN SEE NOW?

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

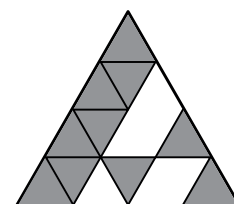
05. IN THE PICTURE, THERE ARE 8 DIFFERENT FACES. EACH FACE APPEARS TWICE, EXCEPT FOR ONE. WHICH FACE APPEARS ONLY ONCE?

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



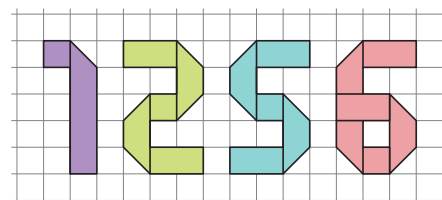
06. BRUNO IS MAKING A LARGE TRIANGLE USING IDENTICAL SMALLER TRIANGULAR TILES. HOW MANY ADDITIONAL TILES DOES BRUNO NEED TO COMPLETE THE LARGE TRIANGLE?

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

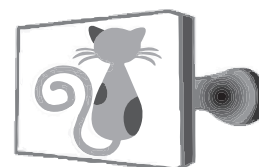


07. EACH NUMBER IN THE IMAGE ON THE RIGHT IS MADE USING A PIECE OF RIBBON. WHICH PIECE OF RIBBON IS THE LONGEST?

- (A) 1 (D) 6
 (B) 2 (E) THEY ARE ALL THE SAME LENGTH.
 (C) 5



08. ELENA USES THE STAMP SHOWN TO MAKE A PICTURE. WHICH PICTURE DOES SHE MAKE?

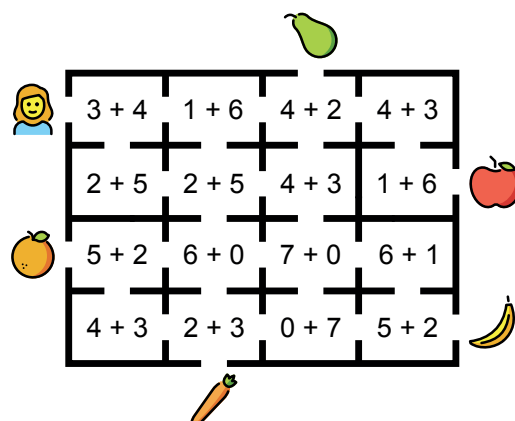


- (A)  (B)  (C)  (D)  (E) 

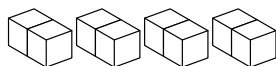
4 POINTS PROBLEMS

09. CATRINA WANTS TO WALK THROUGH THE MAZE SO THAT SHE VISITS ONLY ROOMS WHERE THE ANSWER TO THE SUM IS 7. WHICH FRUIT CAN CATRINA REACH?

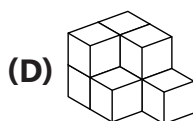
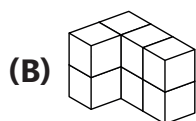
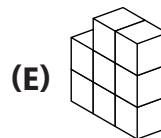
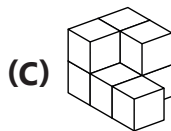
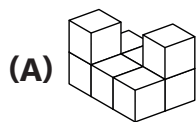
- (A)  (D) 
 (B)  (E) 
 (C) 



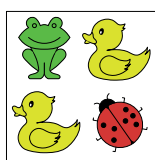
10. A STUDENT HAS 4 BLOCKS, WITH 2 CUBES EACH, AS SHOWN.



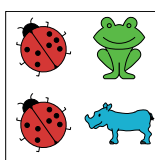
WHICH OF THE FOLLOWING SHAPES **CANNOT** BE MADE USING THESE 4 BLOCKS? THEY ALL CONTAIN 8 CUBES.



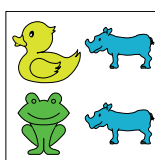
11. CHEN HAS 5 BASKETS, EACH CONTAINING 4 TOYS.



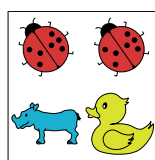
A



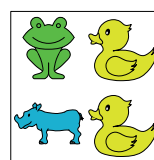
B



C

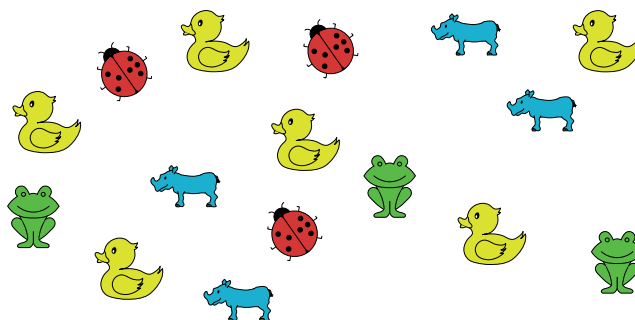


D



E

HE DROPPED 4 OF THE BASKETS AND THE TOYS WERE MIXED UP.



WHICH BASKET DID HE **NOT** DROP?

(A) A

(B) B

(C) C

(D) D

(E) E

12. IN THE DIAGRAM SHOWN, EACH SHAPE REPRESENTS A DIFFERENT VALUE. WHAT IS THE VALUE OF ★?

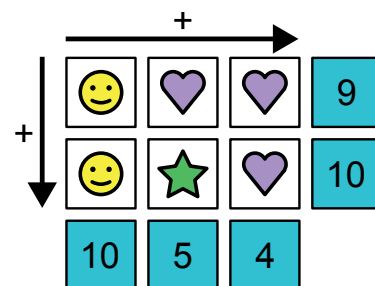
(A) 2

(D) 5

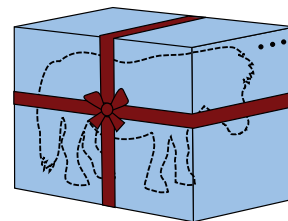
(B) 3

(E) 6

(C) 4

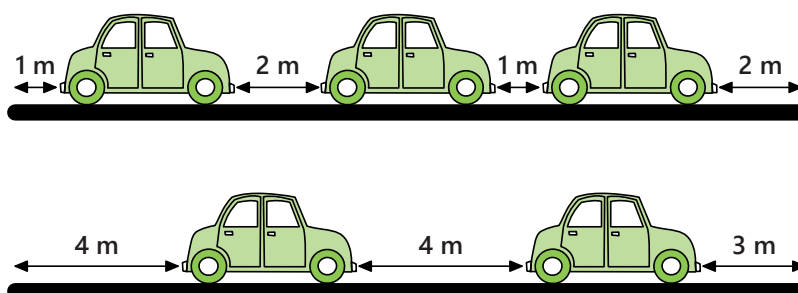


13. A TOY PONY IS INSIDE A BOX THAT IS 1 METRE TALL, 1 METRE WIDE AND 2 METRES LONG. A RIBBON GOES AROUND THE BOX, PASSING OVER ALL SIX SIDES, AS SHOWN. THE KNOT USES AN EXTRA 1 METRE OF RIBBON. HOW LONG IS THE RIBBON IN TOTAL?



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

14. HERE ARE TWO PICTURES OF A BRIDGE, AT DIFFERENT TIMES. THE CARS SHOWN ARE IDENTICAL. THE NUMBERS SHOW THE GAPS IN METRES BETWEEN THE CARS OR THE ENDS OF THE BRIDGE.



HOW LONG IS EACH CAR?

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

15. A LINE OF PICTURES IS MADE BY REPEATING THIS PATTERN OF 5 PICTURES

, ALWAYS IN THE SAME ORDER.



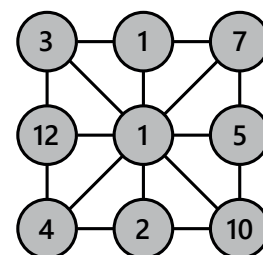
WHICH PICTURE IS IN THE 27TH POSITION IN THE LINE?

- (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.

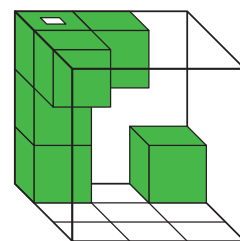
WHICH NUMBER IS THIS?

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



5 POINTS PROBLEMS

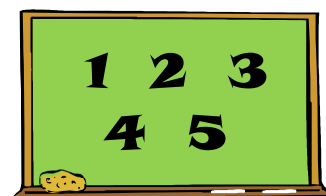
17. CHIARA HAS A TRANSPARENT BOX CONTAINING 6 SMALL CUBES, AS SHOWN. WHAT DOES CHIARA SEE IF SHE LOOKS AT THE BOX FROM ABOVE?



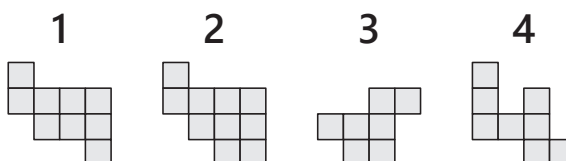
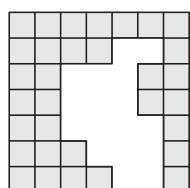
- (A) (B) (C) (D) (E)

18. ESTEBAN WANTS TO ADD TWO DIFFERENT NUMBERS FROM THE BOARD. HOW MANY DIFFERENT RESULTS COULD ESTEBAN GET?

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



19. WHICH TWO PIECES CAN BE USED TO COMPLETE THE GRID WITHOUT OVERLAPPING?



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

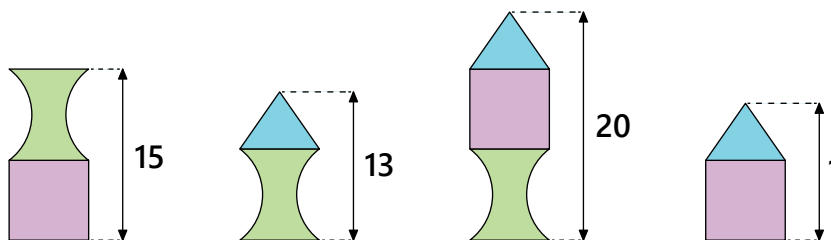
20. ALI, BELLA, CHE AND DIMITRY EACH HAVE 3 SHAPES. EACH CHILD HAS EXACTLY ONE SHAPE IN COMMON WITH EVERY OTHER CHILD.

ALI
 BELLA
 CHE

WHICH SHAPES DOES DIMITRY HAVE?

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

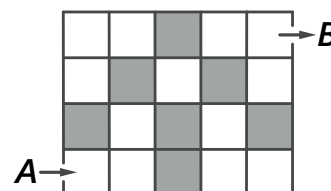
21. ZORAN BUILDS TOWERS FROM THREE TYPES OF FIGURES. THE HEIGHTS OF THREE OF THEM ARE SHOWN IN THE PICTURE.



WHAT IS THE HEIGHT OF THE FOURTH TOWER?

- (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?



- (A) 11 EUROS (C) 13 EUROS (E) 16 EUROS
(B) 12 EUROS (D) 15 EUROS

23. JULIA HAS A LIST OF PROBLEMS TO FINISH DURING MAY. SHE STARTS ON THE 1ST OF MAY. 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?

 **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		

- (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?

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