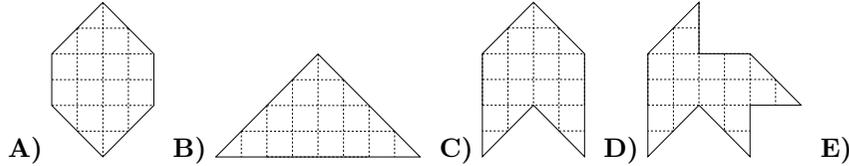
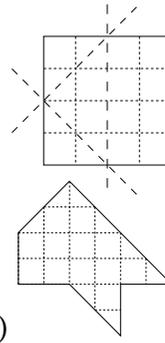


20. A square was cut into 4 parts as shown in the picture. Which of the following shapes cannot be made with these 4 parts?



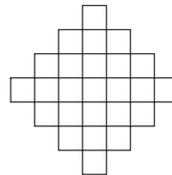
21. Kangaroo Hamish bought three of the toys shown below and gave the shop-assistant 200 kangcoins (200 c). He received 18 kangcoins back. Then he changed his mind and exchanged one of the toys for another. He got back additional 25 kangcoins. What toys did Hamish leave the store with?

Ball 40 c	Doll 73 c	Teddy bear 52 c	Puzzle 48 c	Chess 57 c
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- A) Ball, doll and teddy bear    B) Ball, teddy bear and puzzle  
C) Doll, teddy bear and chess    D) Teddy bear, puzzle and chess  
E) Ball, puzzle and chess

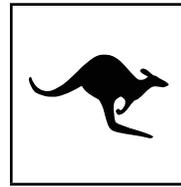
22. Write each of the numbers 0, 1, 2, 3, 4, 5, 6 in the squares  $\square\square + \square\square = \square\square\square$  to make the addition correct. Which digit will be in the grey square?  
A) 2    B) 3    C) 4    D) 5    E) 6

23. What is the largest number of small squares which can be shaded so that no square made of four shaded small squares appears in the figure?  
A) 18    B) 19    C) 20    D) 21    E) 22



24. Nick has written each of the numbers from 1 to 9 in the cells of the  $3 \times 3$  table. Only four of these numbers can be seen in the figure. Nick has noticed that for the number 5 the sum of the numbers in the neighbouring cells equals 13 (neighbouring cells are cells sharing sides). He noticed the same applies for the number 6. Which number has Nick written in the shaded cell?  
A) 5    B) 6    C) 7    D) 8    E) 9

1		2
4		3



# KANGAROO 2014



Time allowed: 75 minutes  
Calculators are not permitted

Minor  
3–4 grades

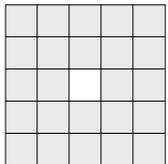
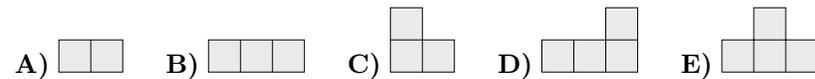
## Questions for 3 points

1. Which drawing is the central part of the picture with the star?



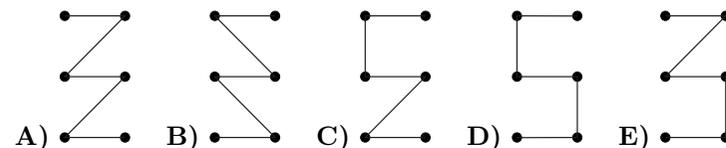
2. Jacky wants to insert the digit 3 somewhere in the number 2014. Where should she insert the digit 3 if she wants her five-digit number to be as small as possible?  
A) In front of 2014    B) Between the 2 and the 0    C) Between the 0 and the 1  
D) Between the 1 and the 4    E) Behind 2014

3. The central cell of the square was removed. We cut it into equal pieces. Which piece is not possible to get?



4. When Koko the koala does not sleep, he eats 50 grams of leaves per hour. Yesterday, he slept 13 hours. How many grams of leaves did he eat yesterday?  
A) 550    B) 130    C) 650    D) 50    E) 450

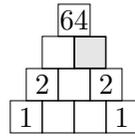
5. Maria subtracts and gets as results the numbers from zero to five. She connects the dots, starting at the dot with the result 0 and ending at the dot with the result 5. Which figure does she get?



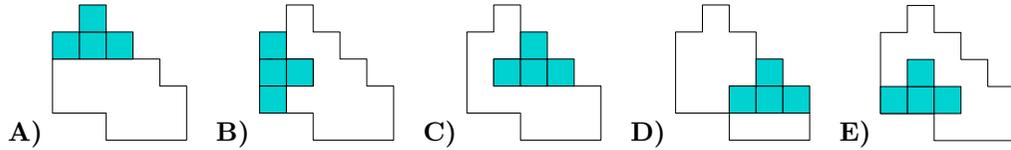
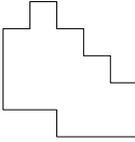
2–2    •    • 6–5  
8–6    •    • 11–8  
13–9    •    • 17–12

6. Adam built fewer sandcastles than Martin but more than Susan. Lucy built more sandcastles than Adam and more than Martin. Dana built more sandcastles than Martin but fewer than Lucy. Who of them built the most sandcastles?  
A) Martin    B) Adam    C) Susan    D) Dana    E) Lucy

7. Monica writes numbers in the diagram so that each number is the product of the two numbers below it. Which number should she write in the grey cell?  
 A) 0 B) 1 C) 2 D) 4 E) 8

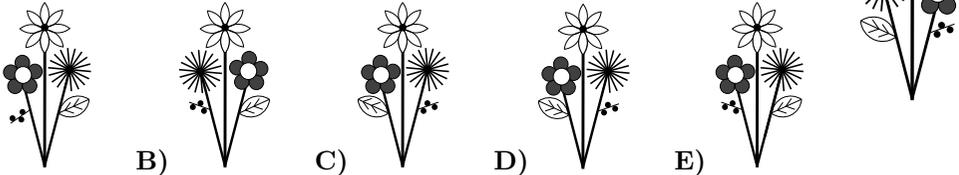


8. Ann has four pieces: . With these pieces she can completely cover the shape on the right. Where should she put the piece ?



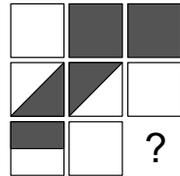
Questions for 4 points

9. Mr. Brown has painted flowers on the store window (see picture). How do these flowers look like from the other side of the window?

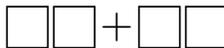


10. Some candies were in a bowl. Sally took half of the candies. Then Tom took half of the candies left in the bowl. After that Clara took half of the remaining candies. In the end there were 6 candies in the bowl. How many candies were in the bowl at the beginning?  
 A) 12 B) 18 C) 20 D) 24 E) 48

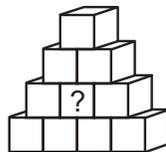
11. Which tile must be added in the picture so that the white area is as big as the black area?



12. Put each of the digits 2, 3, 4 and 5 in to a different square and calculate the sum to get the largest value. What is that value?  
 A) 68 B) 77 C) 86 D) 95 E) 97

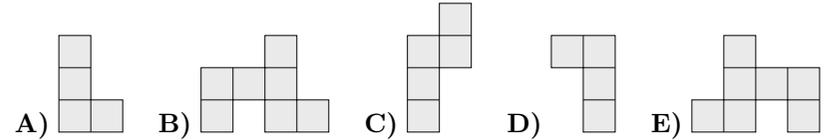
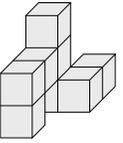


13. Fedya has 4 red cubes, 3 blue cubes, 2 green cubes and 1 yellow cube. He builds a tower (see the picture) in such a way that no two adjacent cubes have the same colour. What is the colour of the marked cube?  
 A) Red B) Blue C) Green D) Yellow E) Impossible to determine

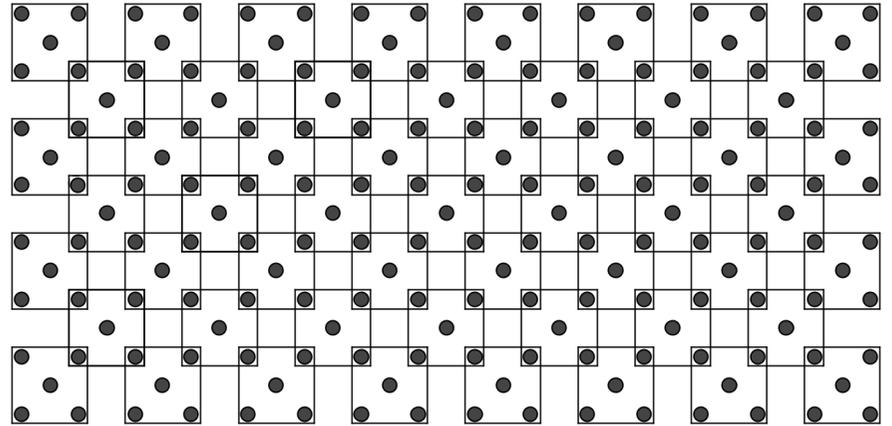


14. Rabbit Borya likes cabbages and carrots very much. In a day he eats either 9 carrots, or 2 cabbages, or 1 cabbage and 4 carrots. During one week Borya has eaten 30 carrots. How many cabbages has he eaten during this week?  
 A) 6 B) 7 C) 8 D) 9 E) 10

15. The solid in the picture was made by sticking eight equal cubes together. How does this solid look from above?



16. How many dots are there in this picture?



- A) 180 B) 181 C) 182 D) 183 E) 265

Questions for 5 points

17. How many numbers are greater than 10 and less than or equal to 31 which can be written with digits 1, 2 and 3 only? (You can repeat digits.)  
 A) 2 B) 4 C) 6 D) 7 E) 8

18. Seven children are standing in a circle. No two boys are standing next to each other. No three girls are standing next to each other. How many girls are standing in the circle?  
 A) 2 B) 3 C) 4 D) 5 E) 6

19. Eve arranged cards in a line as it is shown in the figure. At each move Eve is allowed to interchange any two cards. What is the smallest number of moves Eve needs to get the word KANGAROO?  
 A) 2 B) 3 C) 4 D) 5 E) 6

