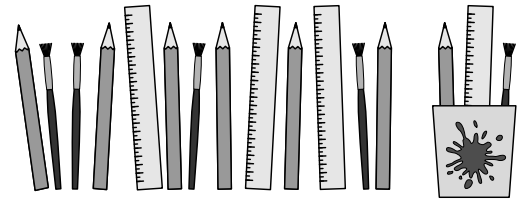


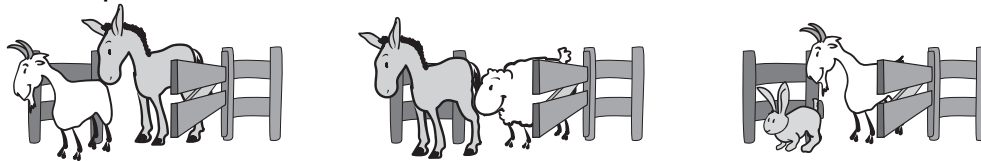


**A7** Ms. Roth fills each cup with a pencil, a paintbrush and a ruler for a lesson. One cup is already full. How many full cups will Ms. Roth have when she is finished?

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



**A8** A gate is open in the petting zoo. Four cheeky animals escape. Ferdinand has taken photos. These are mixed up on the table:

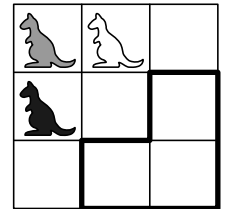


In what order did the four animals escape through the gate?

- (A) rabbit, donkey, goat, sheep      (B) goat, donkey, rabbit, sheep  
 (C) rabbit, goat, donkey, sheep      (D) donkey, sheep, rabbit, goat  
 (E) goat, sheep, rabbit, donkey

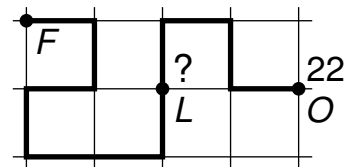
**4 point problems**

**B1** In the picture shown, each row and each column should have one black, one grey and one white kangaroo. What does the bottom right corner look like?



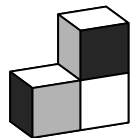
- (A)      (B)      (C)      (D)      (E)

**B2** A flea hops on squared paper along the thick line from point *F* to point *O*. For this he needs 22 hops of equal length. After how many hops is he at point *L*?



- (A) 12      (B) 13      (C) 14      (D) 15      (E) 16

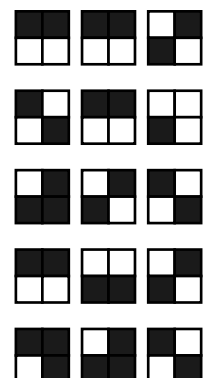
**B3** On each of the three cubes on the right, every black face is opposite a white one, every white face is opposite a black one, and every grey face is opposite a grey one. What do the cubes look like from the back?



from the front

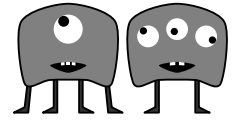
- (A)      (B)      (C)      (D)      (E)

**B4** Each of the numbers 183, 451, 521, 872 and 882 is represented by a row of three patterned squares on the right. A patterned square shows one digit. Squares with the same pattern represent the same digit. Which number is represented by the pattern at the bottom?



- (A) 183      (B) 451      (C) 521      (D) 872      (E) 882

**B5** In the Monster family, each monster has either 1 eye and 4 legs or 3 eyes and 2 legs. Altogether, they have 9 eyes and 16 legs. How many monsters are in the family?



- (A) 9      (B) 8      (C) 7      (D) 6      (E) 5

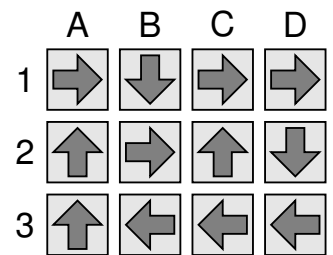
**B6** Ruth builds towers on a square grid using cubes of equal size. The height of the towers is shown on the right. Ruth looks at the towers from the front. Taller towers hide any shorter towers which are behind them. How many towers can Ruth see from the front?

4	8	8	6
2	6	6	8
6	4	2	4
2	2	4	6

↑ ↑ ↑ ↑  
from the front

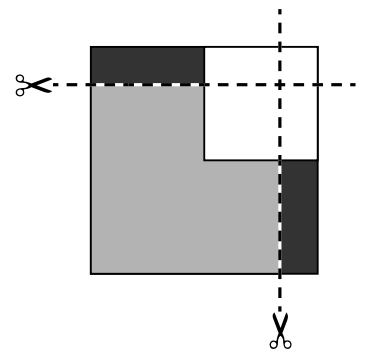
- (A) 8      (B) 9      (C) 10      (D) 11      (E) 12

**B7** Ayla draws a hopscotch game on the ground using chalk. She hops from square to neighbouring square following the directions shown by the arrows. Ayla wants to step on every square once. Which square should she start on?



- (A) A1      (B) B3      (C) C2      (D) D2      (E) A3

**B8** Finn has three paper squares: one black, one grey and one white. First he places the grey one on top of the black and then puts the white one on top, as shown. He cuts along the dotted lines. How many squares does Finn have now?



- (A) 4      (B) 5      (C) 7      (D) 8      (E) 9

**5 point problems**

**C1** Joscha uses six of these cards 

0	1	2	3	4	5	6	7	8	9	+	=
---	---	---	---	---	---	---	---	---	---	---	---

 to make

a correct calculation. He then covers the top part: 

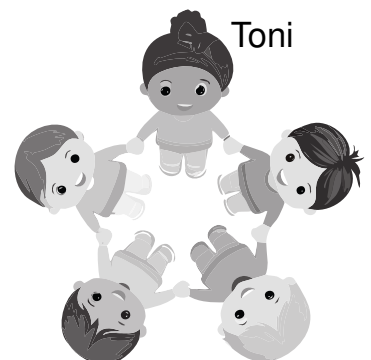
□	□	□	□

What is the sum of the four digits Joscha used?

- (A) 17      (B) 19      (C) 21      (D) 23      (E) 25

**C2** Five children – Kim, Toni, Bo, Charlie and Lou – dance in a circle:

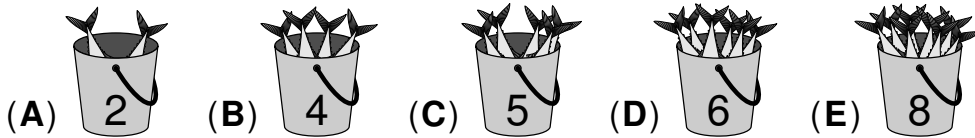
- Kim is holding Toni's left hand.
- Charlie and Bo are not holding hands.
- Bo is holding Lou's right hand.



Who is Charlie holding hands with?

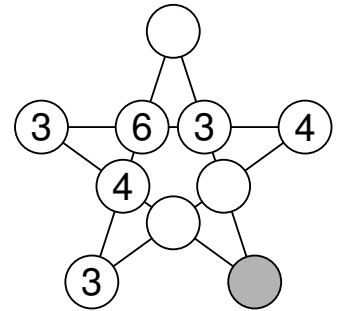
- (A) Toni and Lou      (B) Kim and Toni      (C) Toni and Bo  
(D) Kim and Bo      (E) Bo and Lou

- C3** Each of the five penguins Carmen, Erik, Gloria, Ramón and Viola is given one of the buckets shown. The number on each bucket shows how many fish it contains. If Carmen is given a fish from Erik's bucket, both penguins would have the same number of fish. Gloria has half as many fish as Carmen and Erik do altogether. Which bucket is Erik's?

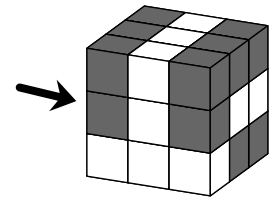
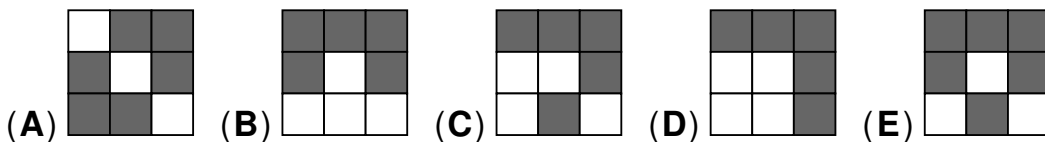


- C4** Each circle in the star shape should contain one number. The four numbers in each straight line should have the same sum. Which number should be written in the grey circle?

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



- C5** Lion builds this large cube using 16 black and 11 white small cubes of equal size. His sister Lily looks at this cube from the left. What could she see?



- C6** I have three coloured boxes. Each contains one type of stick:  $\underline{\hspace{1cm}}$ ,  $\underline{\hspace{2cm}}$ ,  $\underline{\hspace{3cm}}$ . I place one stick from the red box onto the table. Then I place more sticks to the right: one from the blue box, then one from the yellow box, then one again from the red box, and so on. This makes a straight line that is 50 cm long. Which two sticks are at the beginning and end of the line?

(A)  $\underline{\hspace{1cm}}$  and  $\underline{\hspace{2cm}}$  (B)  $\underline{\hspace{1cm}}$  and  $\underline{\hspace{3cm}}$  (C)  $\underline{\hspace{2cm}}$  and  $\underline{\hspace{3cm}}$   
 (D)  $\underline{\hspace{2cm}}$  and  $\underline{\hspace{2cm}}$  (E)  $\underline{\hspace{3cm}}$  and  $\underline{\hspace{3cm}}$

- C7** When Jamal presses one of the 4 buttons shown on the right, the shape on that button and the shapes on neighbouring buttons change: triangles become circles, and circles become triangles. What is the smallest number of times Jamal needs to press a button so that all 4 buttons show circles?

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

- C8** Nika places coins in each of the nine white circles in the picture, with each circle containing at least one coin. The number in each circle shows how many coins altogether are in the other circles touching this one. How many coins did Nika place in the nine white circles in total?

(A) 16 (B) 17 (C) 18 (D) 19 (E) 20

