

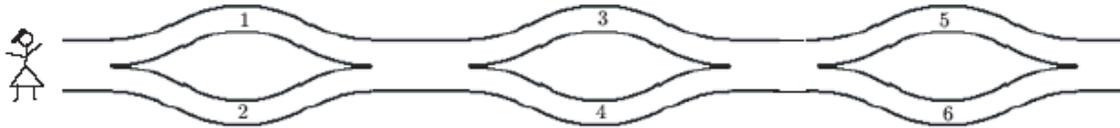
# INTERNATIONAL KANGAROO MATHEMATICS CONTEST 2007

Level Benjamin: Class (5 & 6)

Max Time: 1 Hour & 15 Minutes

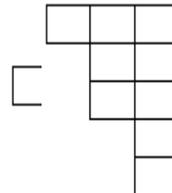
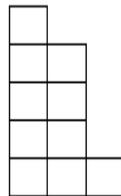
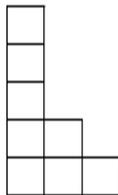
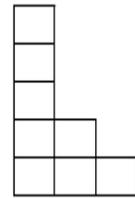
## 3-Point-Problems

**Q1.** Asia walks from the left to the right and puts the numbers in her basket. Which of the following numbers can be in her basket?



- A) 1, 2 and 4      B) 2, 3 and 4      C) 2, 3 and 5      D) 1, 5 and 6

**Q2.** Which piece fits together with the given one to form a rectangle?



- A)      B)      C)      D)

**Q3.** A kangaroo takes 6 seconds for every 4 jumps. How long does it take her to do 10 jumps?

- A) 15      B) 12      C) 10      D) 18

**Q4.**  $2007 \div (2 + 0 + 0 + 7) - 2 \times 0 \times 0 \times 7 = ?$

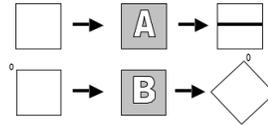
- A) 9      B) 214      C) 223      D) 2007

**Q5.** Usman, who is older than Ali by 1 year minus 1 day, was born on January 1, 2002. What is the date of Ali's birth?

- A) January 2, 2003      B) January 2, 2001      C) December 31, 2000  
D) December 31, 2002

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**Q6.** The Carpenter's shop has two machines *A* and *B*. *A* is a "printing machine" and *B* is a "turning machine". What's the right sequence to obtain  starting from  ?



- A) BBA                      B) ABB                      C) BAB                      D) BA

**Q7.** If you cut a 1 meter cube into 1 decimeter cubes and put one on the other, what height this structure will have?

- A) 100 m                      B) 1 km                      C) 10 km                      D) 10 m

**Q8.** Uzma cut a paper in the shape of a square with perimeter 20 cm into two rectangles. The perimeter of one rectangle was 16 cm. What was the perimeter of the second rectangle?

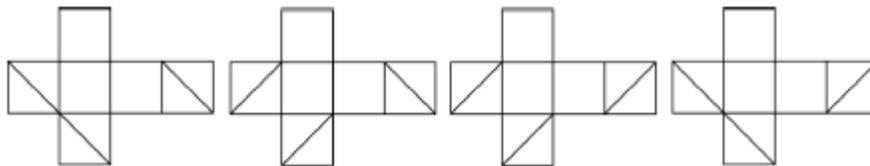
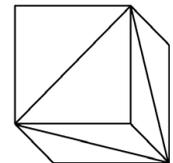
- A) 8 cm                      B) 9 cm                      C) 12 cm                      D) 14 cm

## 4-Point-Problems

**Q9.** In a square grid Hina colours the small squares that lie on the two diagonals. What is the size of the grid if Hina altogether colours 9 small squares?

- A)  $3 \times 3$                       B)  $4 \times 4$                       C)  $5 \times 5$                       D)  $8 \times 8$

**Q10.** In three adjacent faces of a cube, diagonals are drawn as shown in the figure. Which of the following net is that of the given cube?



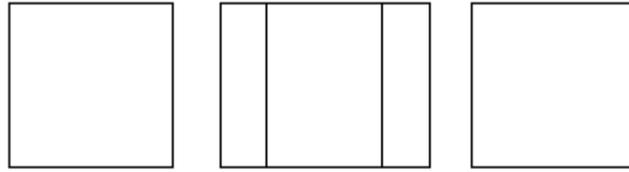
- A)                      B)                      C)                      D)

**Q11.** There were 60 birds at three trees. In some moment 6 birds flew away from the first tree, 8 birds flew away from the second tree, and 4 birds flew away from the third tree. Then there were the same number of birds at each of the three trees. How many birds were there at the second tree at the beginning?

- A) 24                      B) 22                      C) 21                      D) 20

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**Q12.** Two  $9\text{ cm} \times 9\text{ cm}$  squares overlap to form a  $9\text{ cm} \times 13\text{ cm}$  rectangle as shown. Find the area of the region in which the two squares overlap.

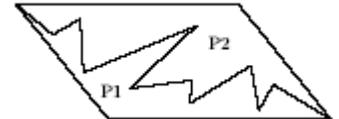


- A)  $36\text{ cm}^2$                       B)  $45\text{ cm}^2$                       C)  $54\text{ cm}^2$                       D)  $63\text{ cm}^2$

**Q13.** Imran let a pigeon out at 7.30 a.m., to deliver a message to Saad. The pigeon delivered the envelope to Saad at 9.10 a.m. A pigeon flies 4 km in 10 minutes. What was the distance between Saad and Imran?

- A) 14 km                      B) 20 km                      C) 40 km                      D) 56 km

**Q14.** A parallelogram is divided in two parts  $P1$  and  $P2$ , as shown in the figure. What sentence is surely true?



- A)  $P2$  has a bigger perimeter than  $P1$                       B)  $P2$  has a smaller perimeter than  $P1$   
 C)  $P2$  has a smaller area than  $P1$                       D)  $P1$  and  $P2$  have the same perimeter

**Q15.** The squares are formed by intersecting the segment  $AB$  of 24 cm by the broken line  $AA_1A_2 \dots A_{12}B$  (see the Fig.). Find the length of  $AA_1A_2 \dots A_{12}B$ .

- A) 72 cm                      B) 96 cm                      C) 56 cm                      D) 106 cm

**Q16.** The 2007<sup>th</sup> letter in the sequence  $KANGAROOKANGAROOKANG \dots$  is

- A) O                      B) A                      C) N                      D) R

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## 5-Point-Problems

**Q17.** Iqra is 10 years old. Her mother Asma is 4 times as old. How old will Asma be when Iqra is twice as old as she is now?

- A) 40 years                      B) 70 years                      C) 60 years                      D) 50 years

**Q18.** To the right side of a given 2-digit number we write the same number obtaining 4-digit number. How many times the 4-digit number is greater than the 2-digit number?

- A) 100                              B) 101                              C) 10                              D) 11

**Q19.** Ahmed thought of an integer. Umar multiplied it either by 5 or by 6. Ali added to the Umar's result either 5 or 6. Tahir subtracted from Ali's result either 5 or 6. The obtained result was 73. What number did Ahmed think of?

- A) 10                              B) 11                              C) 12                              D) 14

**Q20.** The multiplication  $\square Y \square \times \square \square = 7632$  uses each of the digits 1 to 9 exactly once. What is digit Y?

- A) 5                              B) 4                              C) 1                              D) 8