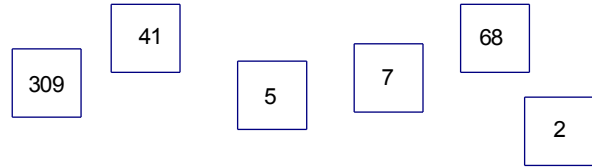


3 Points

1. $3 \times 2006 = 2005 + 2007 + ?$. Find ?.

- A) 2005 B) 2006 C) 2007 D) 2008 E) 2009

2. Six numbers are written on the following cards, as shown: What is the largest number you can form with the given cards?

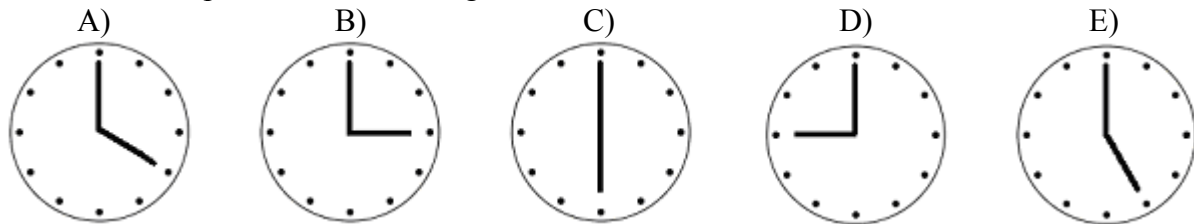


- A) 9 876 543 210 B) 4 130 975 682
C) 3 097 568 241 D) 7 568 413 092 E) 7 685 413 092

3. Four people can sit at a square table. For the school party the students put together 10 square tables in order to make one long table. How many people could sit at this long table?

- A) 20 B) 22 C) 30 D) 32 E) 40

4. Choose the picture where the angle between the hands of a watch is 150° .

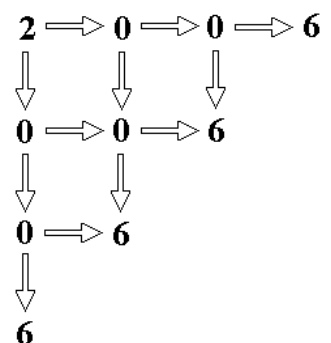


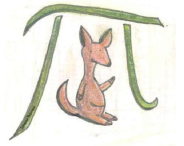
5. On the left side of Main Street one will find all odd house numbers from 1 to 39. On the right side the house numbers are all the even numbers from 2 to 34. How many houses are there on Main Street?

- A) 8 B) 36 C) 37 D) 38 E) 73

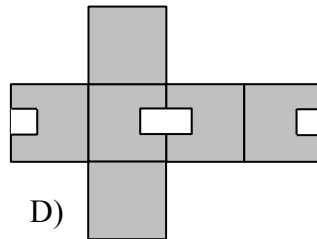
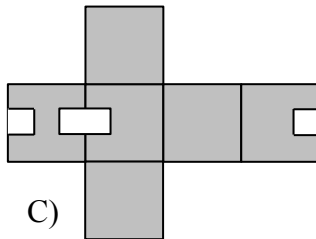
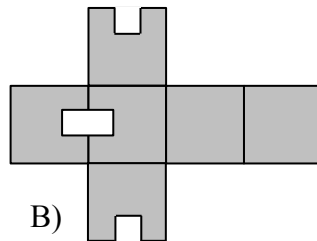
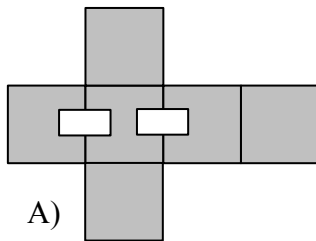
6. With how many ways one can get a number 2006 while following the arrows on the figure?

- A) 12 B) 11 C) 10 D) 8 E) 6

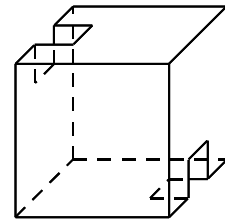




7. A cube in the picture has one of the following nets:



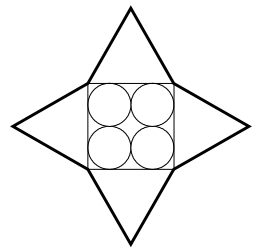
E) none of these.



4 Points

8. What is the perimeter of the star if you know that the star on the picture is formed by four equal circles with radius 5 cm, one square and four equilateral triangles?

- A) 40 cm B) 80 cm C) 120 cm D) 160 cm E) 240 cm

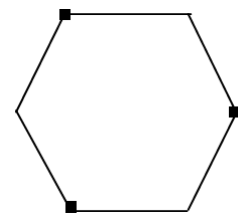


9. What is the difference between the sum of the first 1000 strictly positive even numbers and the sum of the first 1000 positive odd numbers?

- A) 1 B) 200 C) 500 D) 1000 E) 2000

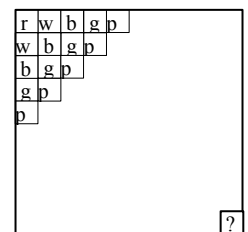
10. A paper in the shape of a regular hexagon, as the one shown, is folded in such a way that the three marked corners touch each other at the centre of the hexagon. What is the obtained figure?

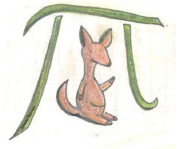
- A) six corner star B) dodecagon C) hexagon D) square E) triangle



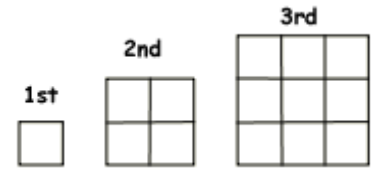
11. A square consists of 10 by 10 little squares. Those little squares are coloured in diagonals: red, white, blue, green, purple, red, white, blue,... What will be the colour of the square in the right below corner?

- A) red B) white C) blue D) green E) purple



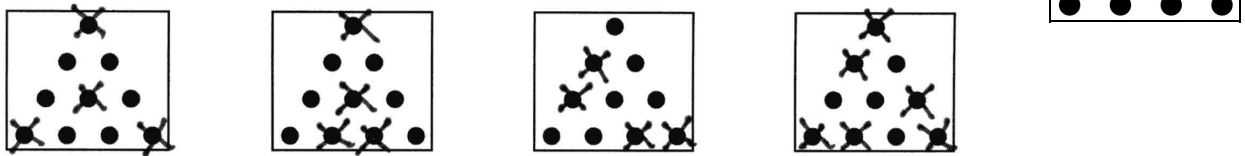


18. Belinda is building squares with matches adding small squares according to the schema of the figure. How many matches does she have to add to the 30th square to build the 31st?



- A) 124 B) 148 C) 61 D) 254 E) 120

19. Eve removed dots from the pattern shown. Her four attempts are here. How many of them still have dots which are the vertices of an equilateral triangle?



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

20. Two friends, Alex and Ben, make fire to cook their food. They use 15 equal pieces of wood. Alex brought 8 and Ben 7. Charlie asks to use their fire for cooking. Charlie wants to pay for that, by using 30 coins all of the same value. The right way to distribute such coins is

- A) 22 to Alex and 8 to Ben B) 20 to Alex and 10 to Ben
C) 15 to Alex and 15 to Ben D) 16 to Alex and 14 to Ben
E) 18 to Alex and 12 to Ben

21. On the edges of a cube letters are written. The figure on the left represents one possibility of its sweep. What letter should be written instead of the question mark in the other version of its sweep (the figure on the right)?



- A) A B) B C) C D) E E) impossible to define