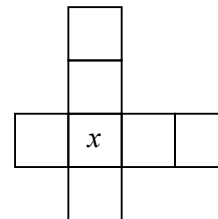


18. The numbers 2, 3, 4, 5, 6, 7, 8 are to be placed, one per square, in the diagram shown such that the four numbers in the horizontal row add up to 21 and the four numbers in the vertical column also add up to 21. Which number should replace x ?



- A 2 B 3 C 5 D 7 E 8

19. In rectangle $PQRS$, the ratio of $\angle PSQ$ to $\angle PQS$ is 1:5. What is the size of $\angle QSR$?

- A 15° B 18° C 45° D 72° E 75°


20. Aroon says his age is 50 years, 50 months, 50 weeks and 50 days old. What age will he be on his next birthday?

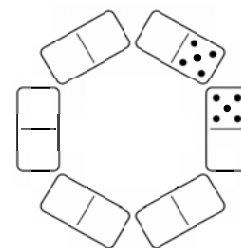
- A 56 B 55 C 54 D 53 E 51

- 21.



Dominic wants to place the six dominoes above in a hexagonal ring so that, for every pair of adjacent dominoes, the numbers of pips match. The ring on the right indicates how one adjacent pair match.

In a completed ring, how many of the other five dominoes can he definitely *not* place adjacent to  ?

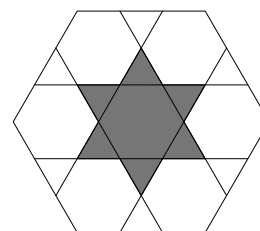


- A 1 B 2 C 3 D 4 E 5

22. The diagram shows a design formed by drawing six lines in a regular hexagon. The lines divide each edge of the hexagon into three equal parts.

What fraction of the hexagon is shaded?

- A $\frac{1}{5}$ B $\frac{2}{9}$ C $\frac{1}{4}$ D $\frac{3}{10}$ E $\frac{5}{16}$



23. Peter wrote a list of all the numbers that could be produced by changing one digit of the number 200. How many of the numbers on Peter's list are prime?

- A 0 B 1 C 2 D 3 E 4

24. After playing 500 games, my success rate at Spider Solitaire is 49%. Assuming I win every game from now on, how many extra games do I need to play in order that my success rate increases to 50% ?

- A 1 B 2 C 5 D 10 E 50

25. The interior angles of a triangle are $(5x + 3y)^\circ$, $(3x + 20)^\circ$ and $(10y + 30)^\circ$ where x, y are positive integers.

What is the value of $x + y$?

- A 15 B 14 C 13 D 12 E 11

