

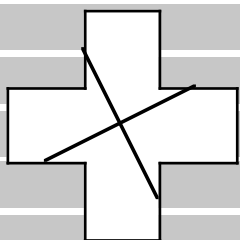
Six Of The Best

Answers!

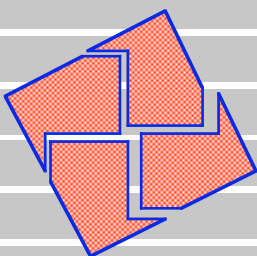
One solution of many for Qu 1:

A♠	J♦	K♣	Q♥
Q♣	K♥	J♠	A♦
J♥	A♣	Q♦	K♠
K♦	Q♠	A♥	J♣

Dissection Instructions for Qu 5:



Assembly Instructions for Qu 5:



SOTB Series 4

1. Take from a pack of cards all the Aces, Kings, Queens and Jacks. Arrange them in a 4 x 4 square so that every row, column and diagonal contains one card of each value and one card of each suit.

SEE LEFT

2. On a certain island, there are Knights (who always tell the truth) and Knaves (who always lie). You meet two people, A and B, and A says "At least one of us is a Knave." What are A and B?

A is a Knight, B is a Knave

3. In a game show there are three doors. Behind one is a car - the other two conceal goats. The competitor suggests Door A. The host opens Door B to reveal a goat, and says "Do you want to change your mind?" What should the competitor do to maximise his chances of winning the car?

The probability that the first guess was correct is 1/3. The probability that Door C is correct is 1/2. So the competitor should switch doors.

4. What is the HUNDREDS digit (only) when you multiply 123456789 by 123456789 ?

It is important only to consider the last three digits of each number as the others have no influence on the Hundreds digit. On a calculator, $789 \times 789 = 622521$, so the Hundreds digit is 5.

5. With two straight lines, cut the Swiss Cross into four congruent pieces which then fit together to make a square. **(SEE LEFT)**

6. In the puzzle below, letters stand for numbers, the same letter always standing for the same number.

$$\begin{array}{r}
 \text{SEND} \qquad \qquad \qquad 9567 \\
 + \text{MORE} \qquad \qquad \qquad +1085 \\
 \hline
 \text{MONEY} \qquad \qquad \qquad 10652
 \end{array}$$

Replace all the letters with the right digits in order to make the addition correct. **(Unique solution shown)**