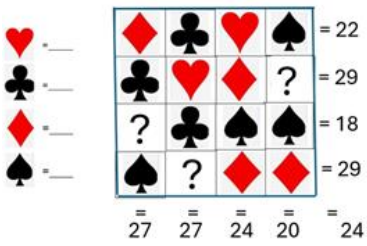
Gordon Burgin's Puzzles

July 2025 solution

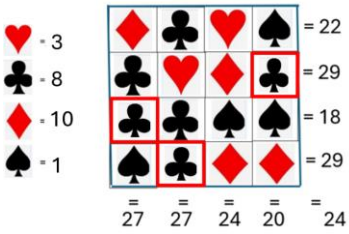
Puzzle One

Each of the four symbols stands for a difference number. In order to satisfy the totals at the end of each row, each column and the diagonal, find the value of the heart, club, diamond & spade symbols. To do this, you will also need to determine the symbols that are required to replace the three ? symbols.

Puzzle:



Solution:



Puzzle Two

A school security door code is a 5-digit number. The digits are ordered from highest to lowest and their product ls 336. What is the sum of the five digits?

Solution: The five, single digit divisors for the number 336 that when multiplied together equals 336 are 1, 2, 4, 6 and 7. Therefore, the security code is **76421** and their sum is **20.**

Puzzle Three

In my office desk, the number of pencils and pens was in the ratio 4 to 5 (4 : 5). I t took out a pen and replaced it with a pencil and now the ratio is 7 to 8 (7 : 8). What is the total number of pencils and pens in my desk?

Solution: As the original ratio of the number of pencils to the number of pens was 4 : 5 (or 4 pencils for every 5 pens) and when a pen is replaced with a pencil, the ratio of pencils to pens becomes 7 : 8. The following approach and answer is provided in the following diagram.

Approach to Solution		Possible Combinations of Pens versus Pencils for both ratios to identify answer (Total = 45)				
4 to 5 Ratio	Pens	4	8	12	16	20
	Pencils	5	10	15	20	25
	Total	9	18	27	36	45
7 to 8 Ratio	Pens	7	14	21		
	Pencils	8	16	24		
	Total	15	30	45		

© 2025 - Gordon R Burgin