

1. \overline{CA} is divisible by 13;

2. \overline{AC} is a square number;

Non-zero: Khác không; Digit: Chữ số; 2-digit number: Số có 2 chữ số; Property: Tính chất; Divisible: Chia hết; Square number: Số chính phương.

117. 5 numbers, A, B, C, D and E , represent different numbers from 1 to 9.

Given the following conditions:

1. The sum of A and E is less than the sum of C and 5.

2. The sum of A, C and E equals D .

3. The sum of A and D equals B .

4. D is divisible by 3.

5. The sum of A and C is less than E .

6. D is greater than 6.

Find the number to represent D .

Different: Khác nhau; Condition: Điều kiện; Sum: Tổng; Less than: Bé hơn; Equal: Bằng; Divisible: Chia hết; Greater than: Lớn hơn.

118. A stationery store had a batch of ball pens. One half but 6 fewer pens were sold on the first day. One half of the remaining part and 8 more pens were sold on the second day. Finally, 20 ball pens are left. How many ball pen(s) did the stationery store have originally?

Half: Một nửa; Remaining: Phần còn lại; Left: Còn lại; Originally: Ban đầu.

119. John wrote a 4-digit number on a piece of paper and asked Peter to guess it.

Peter asked: "Is the number 703?"

John replied: "Two of the digits are correct. The positions of those digits are also correct."

Peter asked again: "Is the number 2745?"

John replied: "Two of the digits are correct. The positions of those digits are all wrong."

Peter asked again: "Is the number 354?"

John said: "All the digits are correct. The positions of those digits are all wrong."

Given all the digits in that 4-digit number are all different, what is the number written by John?

4-digit number: Số có 4 chữ số; Guess: Đoán; Digit: Chữ số; Correct: Đúng;

Position: Vị trí;

Wrong: Sai; Different: Khác nhau.

120. Given that there are 12 signs of the zodiac, at least how many student(s) is / are there such that there exists at least 11 of them having the same sign of the zodiac?

Zodiac: Cung hoàng đạo; Exist: Tồn tại; At least: Ít nhất; The same: Giống nhau.

121. There are 20 problems in a mathematics competition. The scores of each problem are allocated in the following ways: 5 marks will be given for a correct answer, 2 marks will be deducted for each incorrect or unanswered answer. How many questions does Amy answer correctly if her score is 79?

Problem: Bài toán; Score: Điểm số; Allocate: Phân bổ; Mark: Điểm; Correct: Đúng; Incorrect: Sai; Unanswered: Không trả lời; Deduct: Trừ.

122. Given that 9th August 2016 is Tuesday, which day of the week is 19th October 2016? *August: Tháng Tám; Tuesday: Thứ Ba; Day of the week: Ngày trong tuần, thứ; October: Tháng Mười.*

123. Now Andy needs to cut a melon. At least how many cuts are required to ensure that he can get 8 equal parts?

Melon: Quả dưa; At least: Ít nhất; Require: Cần; Ensure: Chắc chắn; Equal: Bằng nhau.

124. John wrote a 3-digit number on a piece of paper and asked Peter to guess it.

Peter asked again: "Is the number 321?"

John replied: "Two digits are correct, but the positions of those digits are both wrong."

Peter asked again: "Is the number 732?"

John said: "All three digits are correct, but the digits are all in the wrong places."

What is the number written by John?

3-digit number: Số có 3 chữ số; Guess: Đoán; Digit: Chữ số; Correct: Đúng;

Position: Vị trí; Wrong: Sai.

125. According to the pattern shown below, how many circles are there from the 1st group to the 10th group?

Pattern: Quy luật; Circle: Hình tròn; 1st group: Nhóm thứ nhất; 10th group: Nhóm thứ 10.



1st Group 2nd Group 3rd Group

126. Given that A and B are two non-zero digits and the 2-digit numbers formed by A and B have the following properties:

a/ \overline{AB} is divisible by 17;

b/ \overline{BA} is a product of 2 odd prime numbers. Find the 2-digit number \overline{BA} .

Non-zero digits: Chữ số khác 0; 2-digit numbers: Số có hai chữ số; Properties: Tính chất; Divisible: Chia hết; Odd prime numbers: Số nguyên tố lẻ.

127. There are some chickens and rabbits on a farm. The number of chickens is 28 more than the number of rabbits. If there are 338 legs in total, how many chickens are there?

More than: Nhiều hơn; In total: Tổng số.

128. A fruit store had a basket of apples. One half and 5 more apples were sold on the first day. One half of the remaining part but 12 fewer apples were sold on the second day. Finally they sold out 68 apples left on the third day. How many apple(s) did the fruit store have originally?

One half: Một nửa; Remaining: Còn lại.

129. John wrote a 4-digit number on a piece of paper and asked Peter to guess it. Peter asked: “Is the number 2435?”

John replied: “Two of the digits are correct. The positions of those digits are also correct.”

Peter asked again: “Is the number 6397?”

John replied: “Two of the digits are correct. The positions of those digits are all wrong.”