Take *any* calendar. Tell your friend to choose 4 days that form a square, for example:

```
 18 19
 25 26
```

Your friend should tell you only the sum of the four days, and you can tell your friend what the four days are.

**How does the puzzle work?**

The next page tells you how to solve this puzzle using Algebra.
Step 1: Call the first number $n$.

**Question 1:** What are the second, third and the fourth numbers?  
**Hint:** Think about how many days in one week?

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**Question 2:** Write an expression that represents the sum of your four numbers, that is, add $n$ and the numbers found in Question 1. Combine like terms:

_____________________________________________________________

Step 2: Call the sum of your four numbers $S$. Then the equation for the sum of four numbers is:

_____________________________________________________________

**Question 3:** Solve the above equation two different ways for the variable $n$.

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**Conclusion:** After your friend selected four days that form a square and told you a sum of these four days, perform the following calculation:

1. Divide the sum by 4 and then subtract 4.
2. That gives you the first number.
3. Add 1, 7, and 8 to get the other three numbers.

**Example:**

Take the following four numbers from the calendar:

```
  18  19
  25  26
```

The sum = 88  
88 divide by 4 is 22;  
22 – 4 = 18  
Number 1 = 18  
Number 2 = 18 + 1 = 19  
Number 3 = 18 + 7 = 25  
Number 4 = 18 + 8 = 26