SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
						1 十七 $\lim\limits_{x \to 0}\dfrac{\sin x}{x}=?$
2 十八 For a convex polyhedral, $V-E+F=?$	**3** 十九 In a square $ABCD$, construct a circle with diameter AD. E is a point on AB such that CE is a tangent of the circle. What does the area of CBE equal?	**4** 二十 $\dfrac{15768}{3942}=?$	**5** 廿一 Given a positive integer sequence $\{a_n\}$ satisfies that n divides a_n and $\left|a_n-a_{n+1}\right|\le 5$, find the largest possible largest possible value of $\dfrac{a_1}{13}$.	**6** 廿二 6 is the smallest perfect number, i.e. a number whose sum of divisors equals twice itself.	**7** 廿三 7 is the smallest number for which the periodic sequence of $\dfrac{1}{n}$ is of length $n-1$.	**8** 立秋 This was the date when David Hilbert first presented some of the Hilbert problems in the 1900 International Congress in Mathematicians.
9 廿五 Since $9=3^{2^1}$, 9 is an exponential factorial.	**10** 廿六 10 is the sum of digits of N if N is the smallest two digit number with the property that $1111\times N$ is a 6-digit number.	**11** 廿七 11 is the smallest integer that is not a Nivenmorphic number in base 10.	**12** 廿八 12 is the ninth Perrin number.	**13** 廿九 If $a^{12}-1$ is divisible by n for all integers a which is coprime with n. Find n.	**14** 七月 Let p, q, r be primes with $pqr=5\left(p+q+r\right)$. Find $p+q+r$.	**15** 初二 How many solutions to Znám's problem of length 7 exist?
16 初三 If $a=m^n=n^m$ for some unequal integers m and n, what is a?	**17** 初四 Today is the 408th (or 414th) birthday of Pierre de Fermat (some dispute about his year of birth).	**18** 初五 18 is one of the Harshad numbers.	**19** 初六 If $IMO\times 57=HK\times 2016$, find the value of HK.	**20** 初七 20 is the smallest primitive abundant number.	**21** 初八 Today is the 226th birthday of Augustin Louis Cauchy.	**22** 初九 When cutting a circle with just six line segments, the maximum number of pieces that can be so created is 22.
23 處暑 There were 23 problems published by David Hilbert in 1900.	**24** 十一 The 4th term of the geometric sequence with first term 3 and common ratio 2.	**25** 十二 In US coins, a quarter is equal to 25 cents.	**26** 十三 Difference of the second pair of amicable numbers: 1210 - 1184.	**27** 十四 $27!+1$ is a prime.	**28** 十五 Given that $157\times n=4396$, find n.	**29** 十六 Do you know that n^2+29 is prime for $n=0,1,\ldots,28$!
30 十七 If $\sin x°=\dfrac{1}{2}$, where $0<x<90$. Find x.	**31** 十八 If $a_1=1$ and $a_n=2a_{n-1}$, find a_5.					

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