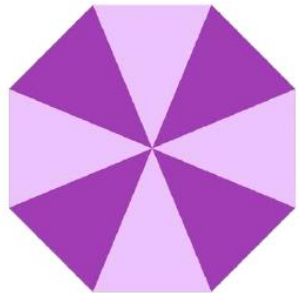










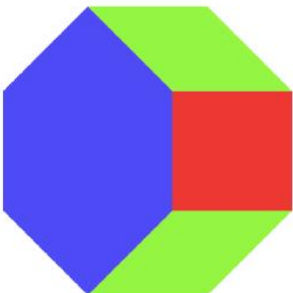











	MONDAY	TUESDAY	WEDNESDAY
F E B R U A R Y			1 Find the term for the development of the binomial $\left(\frac{3}{4}\sqrt[3]{a^2} + \frac{2}{3}\sqrt{a}\right)^{12}$ which contains a^7 
	6 In the development of the binomial $\left(x^3 + \frac{1}{x}\right)^n$ the coefficients of the fourth and eighteenth terms are equal. Find the term where it appears x^4	7  e-day	8 In the expression $\left(\frac{\sqrt[3]{m^2}}{x+\sqrt[3]{m^2}} + m\sqrt[3]{m^{x-2}}\right)^{10}$ find x so that the seventh term is $210m^6$. 
	13 The fourth term of the expansion of the binomial $\left(\frac{\sqrt[3]{5}}{\sqrt[3]{x}} + x \cdot \log x^3 \sqrt{x}\right)^6$ is 100. Find x. 	14 	15 Find the value of x in development $\left(\sqrt[4]{x} + \frac{1}{\sqrt{x}}\right)^8$, knowing that the term containing x raised to an exponent that is $\frac{5}{2}$ the exponent of the next term, is 144 units larger than the last term mentioned.
	20 Let a, b and c be the three-sided lengths of a triangle. We know that a and b are the roots of the polynomial $x^2 - (c+6)x + 6(c+3)$. Find the largest angle of the triangle. 	21 	22 In a geometric progression the first term is the coefficient of the sixth term of the expansion of $(x+y)^8$, and the fifth term (of the progression) is the logarithm of the square root of 2187 in base 3. Calculate: a) the sum of the first ten terms. b) the sum of the whole series.
	27 	28 Find the coefficient of x^{13} in this expression $(x^3 + 1)^2 \left(x^2 - \frac{2}{x}\right)^8$ 	

THURSDAY	FRIDAY	SATURDAY	U
2 For what value of x is the fifth term of the development of $\left(\frac{1}{2\sqrt{x}} - \frac{1}{2}\right)^{10}$ is equal to 105? 	3 	4 Find the central term of $\left(-\sqrt[7]{\frac{1}{a}} \cdot \sqrt{a} - \sqrt[7]{\frac{a-2}{a}}\right)^n$, knowing that the coefficient of the fifth term is to the coefficient of the third term as 11 is to 1.	5
9 Find for what value of x, the sum of the second and fourth terms in the expansion of $\left(\sqrt{2x+1} + \frac{1}{\sqrt{2x}}\right)^m$ is equal to $\frac{129}{2}\sqrt{2}$, knowing that the sum of the binomial coefficients of the last three terms is equal to 11. 	10 	11 The sum of all the coefficients of the expansion of the binomial $\left(\sqrt[3]{x} + -\sqrt[3]{\frac{1}{x}}\right)^m$ is 64. Find the term where the exponent of x is $\frac{5}{2}$	12
16 	17 Find the ninth term of a geometric progression whose second term is the complex $\frac{2}{i}$ and the ratio is $2+i$. 	18 The systems $\begin{cases} x-y=a \\ 2y-x=b \end{cases}$ i $\begin{cases} x+2y=c \\ x+y=22 \end{cases}$ they have the same solutions. Find a, b and c knowing that a, b and c are in geometric progression. 	19
23 	24 The distance from Pont de Suert to Vilaller is x Km. If we express this distance, successively, in Km, Hm, Dm, m, dm, cm and mm and add all these numbers we get 12,222,221. Find x.	25 	26
