

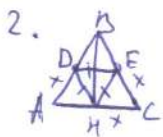
1. $\frac{abc}{123} = \frac{1}{11}$

$\frac{b^2 - ac}{11}$

$\frac{abc}{134} = \frac{5}{11}$
 $\frac{abc}{145} = \frac{11}{11} = 1$
 $\frac{abc}{156} = \frac{19}{11}$

$\frac{abc}{234} = 9 - 8 = 1 \times$
 $\frac{abc}{345} = 16 - 15 = 1 \times$
 $\frac{abc}{456} = 25 - 24 = 1 \times$
 $\frac{abc}{567} = 36 - 35 = 1 \times$

Ж/Б: 1-10 қатар бойы тұрғанда 11-ге бөлінбейді. Сондықтан мүшелердің бойында тұрмайды



$\frac{AD}{D} = \frac{BE}{E}$ $AD + DA = 2x$
 $BE + EC = 2x$
 $AH + HC = 2x$
 $\triangle ABC$ - теңбүйірлі
 $\triangle DEH$ - теңбүйірлі

3.

$a + b + c + d + e = 2021^{2022}$
 $a^{29} + b^{43} + c^{81} + d^{27} + e^9 = 20222021^{2021}$

$a + b + c + d + e = 2021^{2022}$
 $(a^{29} + b^{43} + c^{81} + d^{27} + e^9) = 20222021^{2021} - e^9$
 $3(a^6 + b^5 + c^4 + d^3 + e^2) = 20222021^{2021}$

$a + b + c + d + e = 2021^{2022}$
 $(a^6 + b^5 + c^4 + d^3 + e^2) = 6840673^{2021}$

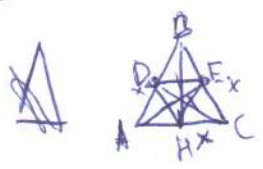
2.



$DH = EH$ $AD = DA$ $\triangle BEH$ - Треугольник
 $AD = BE = 2x$ $BE = EC$
 $AH = HC$

$$\begin{cases} a = 2021 \\ a^{229} = 20222021 \end{cases} \quad \begin{matrix} 2022 \\ 2021 \end{matrix}$$

$$\begin{cases} 2021 \\ a^{229} + b = 2021 \\ a^{229} + b^{2022} = 20222021 \end{cases} \quad \begin{matrix} 2022 \\ 2022 \\ 2022 \end{matrix} \quad b = 0$$



$\triangle BEH$ - Треугольник
 $BD = DA$ $\frac{AD}{2} = \frac{AD}{2}$ $AD + DB = 2x$
 $BE = EC$ $BE + EC = 2x$
 $AH = HC$ $AH + HC = 2x$

$\triangle ABC$ - Треугольник

$$\begin{matrix} 15x - 2021 & 2022 \times 2022 \\ \hline 2022 & 18138 \end{matrix}$$

$$\begin{array}{r} 229 \\ + 243 \\ \hline 972 \\ + 81 \\ \hline 1053 \\ + 27 \\ \hline 1080 \\ + 9 \\ \hline 1089 \end{array}$$

$$\begin{array}{r} 20222021 \mid 2021 \\ \hline 2021 \\ \hline 12021 \\ - 10105 \\ \hline 1916 \end{array}$$

$$\begin{array}{r} 2021 \\ + 2021 \\ \hline 4042 \\ + 4042 \\ \hline 8084 \\ + 2021 \\ \hline 10105 \end{array}$$

$$\begin{array}{r} 2021 \mid 3 \\ \hline - 18 \quad 673(6) \\ \hline - 22 \\ \hline 11 \\ \hline 3 \\ \hline 20 \end{array}$$

$$\begin{cases} a + b + c + d + e = 2021 \\ a^{229} + b^{243} + c^{81} + d^{27} + e^9 = 20222021 \end{cases}$$

$$\begin{cases} a - b - c - d - e = 1 - 2021 \\ -a^{229} - b^{243} - c^{81} - d^{27} - e^9 = 20222021 \end{cases}$$

$$\begin{cases} 5x = 2021 \\ 5x^{1083} = 20222021 \end{cases}$$

$$\begin{cases} 5x = 2021 \\ x = 20222021 \end{cases} \quad 5^{1083} = 44444,2$$

$$\begin{cases} x = 2021 \\ x = 44444,2 \end{cases} \quad 5 = 2021 \cdot 404,4$$

$$\begin{cases} a + b + c + d + e = 2022 \\ a + b + c + d + e = 20222021 \end{cases}$$

$a = 20222021$
 $b = 20222021$

$$\begin{array}{r} 2021 \\ - 20 \\ \hline 021 \end{array}$$

$$\begin{array}{r} 2022 \mid 2021 \mid 229 \\ \hline 1458 \\ \hline 5642 \end{array}$$

$$\begin{array}{r} 44,2 \\ + 5 \\ \hline 49,2 \end{array}$$

$$\begin{array}{r} 2021 \mid 9 \\ \hline - 8 \\ \hline 28 \\ \hline 8 \\ \hline 44 \end{array}$$

$$\begin{array}{r} 2021 \\ - 243 \\ \hline 8 \end{array}$$

$$\begin{array}{r} 2021 \\ + 2021 \\ \hline 4042 \\ + 4042 \\ \hline 8084 \\ + 2021 \\ \hline 10105 \end{array}$$

$$\begin{array}{r} 2021 \\ - 729 \\ \hline 2 \end{array}$$

$$\begin{array}{r} 2021 \\ - 1083 \\ \hline 332 \end{array}$$

$$\begin{array}{r} 4084441 \\ + 4084441 \\ \hline 8168882 \end{array}$$

$$\begin{array}{r} 4084441 \\ \times 2021 \\ \hline 8168882 \\ 0000000 \\ 0000000 \\ \hline 8168882 \end{array}$$

$$\begin{array}{r} 8168882 \\ + 0000000 \\ \hline 8168882 \end{array}$$

$$\begin{array}{r} 20222021 \mid 5 \\ \hline 20 \\ \hline 22 \\ - 20 \\ \hline 22 \\ - 20 \\ \hline 20 \end{array}$$

$$\frac{b^2 - ac}{H}$$

$$\frac{abc}{125} \quad 4-3=1 \quad \frac{abc}{234} = 9-8=1$$

$$22-4 \quad 6 \quad 21-4=75 \quad 50-4=46$$

$$\begin{matrix} b=1 \\ a=2 \\ c=3 \end{matrix} \quad 1^2 - 6 = 5$$

$$\begin{matrix} b=2 \\ a=3 \\ c=4 \end{matrix}$$

$$\begin{matrix} b=2 \\ a=4 \\ c=5 \end{matrix}$$

$$\begin{matrix} b=2 \\ a=5 \\ c=6 \end{matrix}$$

$$\begin{matrix} b=2 \\ a=6 \\ c=7 \end{matrix}$$

$$\begin{matrix} b=2 \\ a=7 \\ c=8 \end{matrix}$$

$$\begin{matrix} b=2 \\ a=8 \\ c=9 \end{matrix}$$

$$\begin{matrix} b=2 \\ a=9 \\ c=10 \end{matrix}$$

$$\begin{array}{r} 2 \sqrt{22202113} \\ - 18 \\ \hline 22 \\ - 18 \\ \hline 48 \\ - 3 \\ \hline 12 \\ - 12 \\ \hline 020 \\ - 18 \\ \hline 22 \end{array}$$

$$\begin{matrix} b=1 \\ a=3 \\ c=4 \end{matrix} \quad 1^2 - 12 = 11 = -1$$

$$\begin{matrix} b=1 \\ a=4 \\ c=5 \end{matrix}$$

$$\begin{matrix} b=1 \\ a=5 \\ c=6 \end{matrix}$$

$$\begin{matrix} b=1 \\ a=6 \\ c=7 \end{matrix}$$

$$\begin{matrix} b=1 \\ a=4 \\ c=8 \end{matrix} \quad -55 = -5$$

$$\begin{matrix} b=1 \\ a=8 \\ c=9 \end{matrix}$$

$$\begin{matrix} b=1 \\ a=9 \\ c=10 \end{matrix}$$

$$\frac{abc}{123} = 1$$

$$\frac{abc}{124} = 5$$

$$\frac{abc}{145} = \frac{11}{11} = 1$$

$$\frac{abc}{166} = 19$$

$$\frac{abc}{283} = \frac{11}{11}$$

$$\frac{abc}{262} = \frac{22}{11} = 2$$

$$\frac{abc}{278} = \frac{33}{11} = 3$$

$$\frac{abc}{1510} = \frac{81}{20} = \frac{11}{11}$$

$$\begin{matrix} b=3 \\ a=4 \\ c=1 \end{matrix} \quad 81 - 4 = 77 = 7$$

$$81 - 66 = 15$$

$$81 - 55 = 26$$

$$81 - 44 = 37$$

$$81 - 33 = 48$$

$$81 - 22 = 59$$

$$81 - 11 = 70$$

$$64 - 55 = 9$$

$$64 - 44 = 20$$

$$64 - 33 = 31$$

$$64 - 22 = 42$$

$$64 - 11 = 53$$

$$49 - 44 = 5$$

$$49 - 33 = 16$$

$$\begin{matrix} b=9 \\ a=3 \\ c=5 \end{matrix} \quad \frac{26}{11} = 6$$

$$\begin{matrix} b=10 \\ a=3 \\ c=4 \end{matrix}$$

$$\begin{matrix} b=9 \\ a=10 \\ c=7 \end{matrix} \quad \frac{10}{11} = 1$$

$$\begin{matrix} b=10 \\ a=8 \\ c=5 \end{matrix} = 5$$

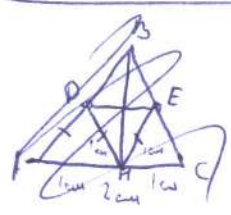
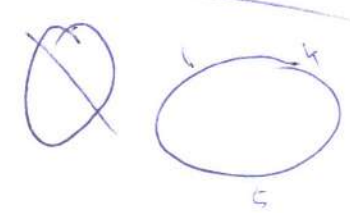
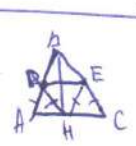
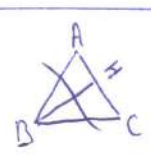
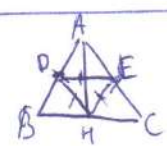
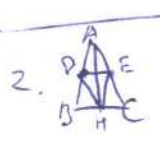
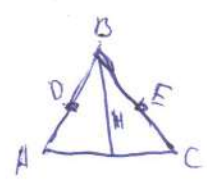
$$\begin{matrix} b=8 \\ a=4 \\ c=9 \end{matrix} \quad \frac{49}{11} = 4$$

$$64 - 9 = 55 = \frac{55}{11} = 5$$

$$\begin{array}{r} 2022 \overline{) 19} \\ - 18 \\ \hline 12 \\ - 11 \\ \hline 1 \\ - 1 \\ \hline 0 \end{array}$$

$$\begin{array}{r} 100 - 55 = 45 \\ 100 - 44 = 56 \\ 100 - 33 = 67 \\ 100 - 22 = 78 \\ 100 - 11 = 89 \end{array}$$

$$\begin{matrix} b=7 \\ a=5 \\ c=1 \end{matrix}$$



HE = DH - ГЕрц багортани
AB = BC = ?

$$\begin{array}{r} 2021^2 \\ \times 2021 \\ \hline 4042 \\ + 0000 \\ + 4042 \\ + 2021 \\ \hline 4084441 \end{array}$$