

| | | | | | |
|---|---|---|---|---|-------|
| 1 | 2 | 3 | 4 | 5 | Итого |
| 5 | 7 | 0 | 0 | 7 | 195 |

Prof

11.1

$$x + y = 5$$

$$x + y + x^2 + y + xy^2 = 24$$

$$(x+y)(1+xy) = 24$$

$$5(1+xy) = 24$$

$$1+xy = 4,8$$

$$xy = 3,8$$

$$x^3 + y^3 = (x+y)(x^2 - xy + y^2) = (x+y)(x^2 + y^2 - 3xy) =$$

$$= 5(25 - 3 \cdot 3,8) = 5 \cdot (25 - 11,4) = 5 \cdot 13,6 = 68$$

ошибка в формуле!

Ответ: $x^3 + y^3 = 68$

58

11.5

| | | | | | |
|---|----|----|---|----|--|
| | 0 | | | | |
| | 1 | -1 | 1 | | |
| 0 | -1 | 2 | 0 | -1 | |
| | 1 | 0 | 0 | | |
| | -1 | | | | |

76

11.4

$$\sin \angle A = 2 \sin \angle B \cos \angle C$$

$$\sin d = 2 \sin d \cos d$$

$$\angle A = 2d$$

$$\angle B = \angle C = d$$

гомометрия $d = 45^\circ$

$$\sin 90 = 2 \sin 45 \cos 45$$

$$1 = 2 \cdot \frac{\sqrt{2}}{2} \cdot \frac{\sqrt{2}}{2}$$

$$1 = \frac{2}{2}$$

$$1 = 1$$

$\Rightarrow \triangle ABC$ - равно-
бедренный

08.

11.2

$$9 + 99 + 999 + \dots + \underbrace{9 \dots 9}_{2019} \quad \text{last } 2019 \cdot 9 \quad (10-1) + (100-1) \leq \frac{1110}{2} - 2$$

$$(10-1) + (100-1) + (1000-1) \leq \frac{1110}{3} - 3$$

$$(10-1) + (100-1) + (1000-1) + (10000-1) \leq \frac{11110}{4} - 4$$

$$\Downarrow$$

$$9 + 99 + \dots + 9 \dots 9 = \frac{1 \dots 10}{2019} - 2019$$

$$\frac{1 \dots 1(11110 - 2019)}{2019}$$

$$\begin{array}{r} 11110 \\ 2019 \\ \hline 09091 \end{array}$$

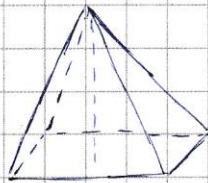
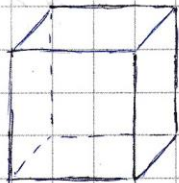
$$\frac{1 \dots 109091}{2019}$$

$$2019 + 1 \leq 2016$$

Answer: 2016 ~~equally~~

~~76~~

11.3



$$V_{\text{cube}} = a^3$$

$$V_{\text{pyr}} = \frac{a^2 h}{3}$$

$$S_{\text{cube}} = a^2 \cdot 6$$

$$S_{\text{pyr}} = \frac{1}{3} S_{\text{base}} H = \frac{a^2 H}{3}$$

~~05~~