Ρητοί Αριθμοί

Να υπολογίσετε τις τιμές των παραστάσεων:

1. $(+5)+(-7)=$

2. $(+5)-(-7)=$

3. $(-3+2)-(5-3)+(7-8)=$

4. $5+(-6+5)-(-8-2)=$

5. $-6-(-3)+(-6+5-2)-(-5+3+2)=$

6. $1-[-2+(-7+3)]-(5+3-2)=$

7. $1-2\bullet[3-(-4+5)]\bullet[-2+(7-8)]=$

8. Αν $\alpha = -1+(3-5)$ και $\beta = 5-(-2+7-3)$

να υπολογίσετε την τιμή της παράστασης:

$$K = 5-(\alpha-3)+(1-\beta)$$

9. Να υπολογίσετε την τιμή της παράστασης:

$$A = (18-\frac{2}{5}):\frac{44}{5}-\frac{39}{5}\cdot\left(\frac{\frac{5}{11}}{3+\frac{6}{11}}\right)$$

$$(+5)+(-7)=$$

$$+5-7=-2$$

$$(+5)-(-7)=$$

$$+5+7=+12$$

$$(-3+2)-(5-3)+(7-8)=$$

$$(-1)-(+2)+(-1)=$$

$$-1-2-1=-4$$

$$5+(-6+5)-(-8-2)=$$

$$5+(-1)-(-10)=$$

$$5-1+10=$$

$$+15-1=+14$$

$$-6-(-3)+(-6+5-2)-(-5+3+2)=$$

$$-6-(-3)+(-6+5-2)-(-5+3+2)=$$

$$-6-(-3)+(-8+5)-(-5+5)=$$

$$-6-(-3)+(-3)-0=$$

$$-6+3-3=-6$$

$$1-[-2+(-7+3)]-(5+3-2)=$$

$$1-[-2+(-4)]-(+6)=$$

$$1-(-2-4)-(+6)=$$

$$1-(-6)-(+6)=$$

$$1+6-6=1$$

$$1-2\cdot[3-(-4+5)]\cdot[-2+(7-8)]=$$

$$1-2\cdot[3-(+1)]\cdot[-2+(-1)]=$$

$$1-2\cdot(3-1)\cdot(-2-1)=$$

$$1-2\cdot(+2)\cdot(-3)=$$

$$1+12=13$$

8. Αν $\alpha = -1+(3-5)$ και $\beta = -5-(+2-7+3)$

να υπολογίσετε την τιμή της παράστασης:

$$K = 5-(\alpha-3)+(1-\beta)$$

Λύση

$\alpha = -1+(3-5)$

$\alpha = -1+(-2)$

$\alpha = -1-2$

$\alpha = -3$

$\beta = -5-(+2-7+3)$

$\beta = -5-(+5-7)$

$\beta = -5-(-2)$

$\beta = -5+2$

$\beta = -3$

$K = 5-(\alpha-3)+(1-\beta)$

$K = 5-(-3-3)+[1-(-3)]$

$K = 5+6+(1+3)$

$K = 5+6+4$

$K = +9+6$

$K = +15$

9. Να υπολογίσετε την τιμή της παράστασης:

$$A=(18-\frac{2}{5}):\frac{44}{5}-\frac{39}{5}\cdot\left(\frac{\frac{5}{11}}{3+\frac{6}{11}}\right)$$

$$A=(\frac{18}{1}-\frac{2}{5}):\frac{44}{5}-\frac{39}{5}\cdot\left(\frac{\frac{5}{11}}{\frac{3}{1}+\frac{6}{11}}\right)$$

$$A=(\frac{90}{5}-\frac{2}{5}):\frac{44}{5}-\frac{39}{5}\cdot\left(\frac{\frac{5}{11}}{\frac{33}{11}+\frac{6}{11}}\right)$$

$$A=(\frac{88}{5}):\frac{44}{5}-\frac{39}{5}\cdot\left(\frac{\frac{5}{11}}{\frac{39}{11}}\right)$$

$$A=(\frac{88}{5})\cdot\frac{5}{44}-\frac{39}{5}\cdot\left(\frac{\frac{5}{11}}{\frac{39}{11}}\right)$$

$$A=(\frac{88}{5})\cdot\frac{5}{44}-\frac{39}{5}\cdot\left(\frac{\frac{5}{11}}{\frac{39}{11}}\right)$$

$$A=\frac{88}{44}-\frac{39}{5}\cdot\left(\frac{5}{39}\right)$$

$$A=2-1$$

$$A=1$$