SP 23.4. 8A 2.část

MOCNINY SOUČINU A PODÍL MOCNIN

1. Zapiš jako jednu mocninu

a) $5^3 \cdot 16^3 = (\qquad)$

b) $(-8)^5 \cdot (-7)^5 = (\qquad)$

c) $(-4)^8 \cdot 9^8 = (\qquad)$

d) $8^{26} \cdot (-5)^{26} = (\qquad)$

e) $18^{12} \cdot (-3)^{12} = (\qquad)$

f) $(-19)^{15} : (-13)^{15} = (\qquad)$

2. Zapiš jako jednu mocninu

a) $\frac{2^5}{3^5} = (\ \text{———}\ )$

b) $\frac{59^{36}}{58^{36}} = (\ \text{———}\ )$

c) $\frac{(-19)^7}{(-14)^7} = (\text{———})$

d) $\frac{(-9)^{11}}{(-5)^{11}} = (\text{———})$

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3. Zkontroluj správnost výpočtu, piš ano-ne, chyby oprav

a) $\frac{8^5}{2^5} = \left(\frac{8}{2}\right)^5 = 4^5$ **ANO NE**

b) $\frac{(-33)^{17}}{11^{17}} = \left(-\frac{33}{11}\right)^{17} = (-3)^{17} = -3$ **ANO NE**

c) $\frac{(-9)^6}{(-27)^6} = \left(\frac{9}{27}\right)^6 = \left(\frac{1}{3}\right)^6 = \frac{1}{3^6}$ **ANO NE**

d) $\frac{5^4 \cdot 6^4}{15^4} = \left(\frac{5 \cdot 6}{15}\right)^4 = 2^4$ **ANO NE**

e) $\frac{2^{18} \cdot 12^{18}}{(-16)^{18}} = \left(\frac{2 \cdot 12}{-16}\right)^{18} = \left(\frac{3}{-2}\right)^{18} = -\left(\frac{3}{2}\right)^{18}$ **ANO NE**

f) $\frac{(-7)^9 \cdot 8^9}{14^9} = \left(\frac{(-7) \cdot 8}{14}\right)^9 = \left(-\frac{56}{14}\right)^9 = (-4)^9 = -4^9$ **ANO NE**

g) $\frac{4^3 \cdot (-5)^3}{(-2)^3 \cdot (-2)^3} = \left(\frac{4 \cdot (-5)}{(-2) \cdot (-2)}\right)^3 = \left(\frac{-20}{-4}\right)^3 = 5^3$ **ANO NE**

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