Lösung 10.02.2021

S. 80/13a) $5^{-2} \cdot 25 = \frac{1}{5^2} \cdot 25 = \frac{25}{25} = 1$

b) $4^{-1} + 2 = \frac{1}{4^1} + 2 = \frac{1}{4} + 2 = 2\frac{1}{4}$

c) $\left(\frac{3}{8}\right)^2 \cdot \frac{1}{3} = \frac{3 \cdot 3 \cdot 1}{8 \cdot 8 \cdot 3} = \frac{3 \cdot 1 \cdot 1}{8 \cdot 8 \cdot 1} = \frac{3}{64}$

d) $2^{-2} - \frac{1}{8} = \frac{1}{2^2} - \frac{1}{8} = \frac{1}{4} - \frac{1}{8} =$

$= \frac{2}{8} - \frac{1}{8} = \frac{1}{8}$

e) $(-3)^{-3} = \frac{1}{(-3)^3} = \frac{1}{(-3) \cdot (-3) \cdot (-3)} = \frac{1}{-27} =$

$= -\frac{1}{27}$

f) $(-2)^{-4} = \frac{1}{(-2)^4} = \frac{1}{(-2) \cdot (-2) \cdot (-2) \cdot (-2)} = \frac{1}{16}$

g) $5^{-3} \cdot \frac{1}{2} = \frac{1}{5^3} \cdot \frac{1}{2} = \frac{1 \cdot 1}{125 \cdot 2} = \frac{1}{250}$

h) $6^{-3} + \frac{161}{216} = \frac{1}{6^3} + \frac{161}{216} =$

$= \frac{1}{6 \cdot 6 \cdot 6} + \frac{161}{216} =$

$= \frac{1}{216} + \frac{161}{216} = \frac{162}{216} = \frac{81}{108} =$

$$= \frac{9}{12} = \frac{3}{4}$$