MolF 8.1 Lösungen

1. $3{,}9r + 9\frac{2}{5}s - [(23{,}25s + 13{,}8r) - (17\frac{3}{5}r - 6\frac{1}{4}s)] - 47\frac{1}{4}s =$

$= 3{,}9r + 9{,}4s - [23{,}25s + 13{,}8r - 17{,}6r + 6{,}25s] - 47{,}25s =$

$= 3{,}9r + 9{,}4s - 29{,}5s + 3{,}8r - 47{,}25s =$

$= 7{,}7r - 67{,}35s$

2. $(-2a^2) \cdot (-2a)^2 \cdot (2(-b)^2) \cdot (-2b)^2 =$

$= -2a^2 \cdot 4a^2 \cdot 2b^2 \cdot 4b^2 =$

$= -64a^4b^4$

3. $[(-\frac{1}{2})^3 + (\frac{1}{2})^2] - [(\frac{1}{2})^3 - (-\frac{1}{2})^2] =$

$= [-\frac{1}{8} + \frac{1}{4}] \cdot [\frac{1}{8} - \frac{1}{4}] =$

$= \frac{1}{8} \cdot (-\frac{1}{8}) = -\frac{1}{64}$

4. $(-\frac{1}{2} + \frac{1}{3}) : (-1\frac{1}{3}) =$

$-\frac{1}{6} : (-\frac{4}{3}) = -\frac{1}{6} \cdot (-\frac{3}{4}) = +\frac{1}{8}$

5. $[(-90) : (-3)^2 + 5 \cdot 2^4 : (-2)^3] : (-5)^2 =$

$= [(-90) : 9 + 5 \cdot 16 : (-8)] : 25 =$

$= [-10 + 80 : (-8)] : 25 =$

$= [-10 - 10] : 25 = -20 : 25 = -\frac{20}{25} = -\frac{4}{5}$

10.11. Lin