1. a.) $\frac{3}{4} + \frac{1}{4} \cdot \frac{2}{3} - \frac{1}{3} : \frac{1}{2} = \frac{3}{4} + \frac{1}{6} - \frac{1}{3} \cdot \frac{2}{1} =$

$\frac{3}{4} + \frac{1}{6} - \frac{2}{3} = \frac{9}{12} + \frac{2}{12} - \frac{8}{12} = \frac{3}{12} = \frac{1}{4}$ 1

(2) b.) $\left(\frac{5}{6} - \frac{1}{12}\right) \cdot \frac{2}{3} - \frac{1}{4} : \frac{3}{8} = \left(\frac{10}{12} - \frac{1}{12}\right) \cdot \frac{2}{3} - \frac{1}{4} \cdot \frac{8}{3} =$

$\frac{9}{12} \cdot \frac{2}{3} - \frac{2}{3} = \frac{1}{2} - \frac{2}{3} = \frac{3}{6} - \frac{4}{6} = -\frac{1}{6}$ 1

2. a.) $\frac{3}{8} + \frac{1}{6} = \frac{9}{24} + \frac{4}{24} = \frac{13}{24}$ ½

b.) $\frac{5}{12} - \frac{1}{8} = \frac{10}{24} - \frac{3}{24} = \frac{7}{24}$ ½

c.) $\frac{35}{72} \cdot \frac{40}{49} = \frac{25}{63}$ ½

(3) d.) $\frac{21}{40} : \frac{12}{35} = \frac{21}{40} \cdot \frac{35}{12} = \frac{49}{32}$ ½

e.) $0{,}5 : \frac{1}{6} = \frac{1}{2} : \frac{1}{6} = \frac{1}{2} \cdot \frac{6}{1} = 3$ ½

f.) $\frac{1}{12} \cdot 0{,}9 = \frac{1}{12} \cdot \frac{9}{10} = \frac{3}{40}$ ½

3. a.) $x = \frac{2}{5} - \frac{1}{4} = \frac{8}{20} - \frac{5}{20} = \frac{3}{20}$ ½

b.) $x = 6 : \frac{4}{5} = \frac{6}{1} \cdot \frac{5}{4} = \frac{15}{2}$ ½

(2) c.) $x = \frac{2}{3} : \frac{3}{4} = \frac{2}{3} \cdot \frac{4}{3} = \frac{8}{9}$ ½

d.) $x = \frac{1}{4} \cdot \frac{5}{2} = \frac{5}{8}$ ½

4. $\frac{2}{3} \cdot x = \frac{8}{15}$ ↷ $x = \frac{8}{15} : \frac{2}{3} = \frac{8}{15} \cdot \frac{3}{2} = \frac{4}{5}$

(1) Zahl: $\frac{4}{5}$. 1

5. $V = 48 \cdot 6m \cdot 2,5m \cdot 2,5m$

$= 120m \cdot 15m^2$

(1) $= \underline{1'800\ m^3}$ 1

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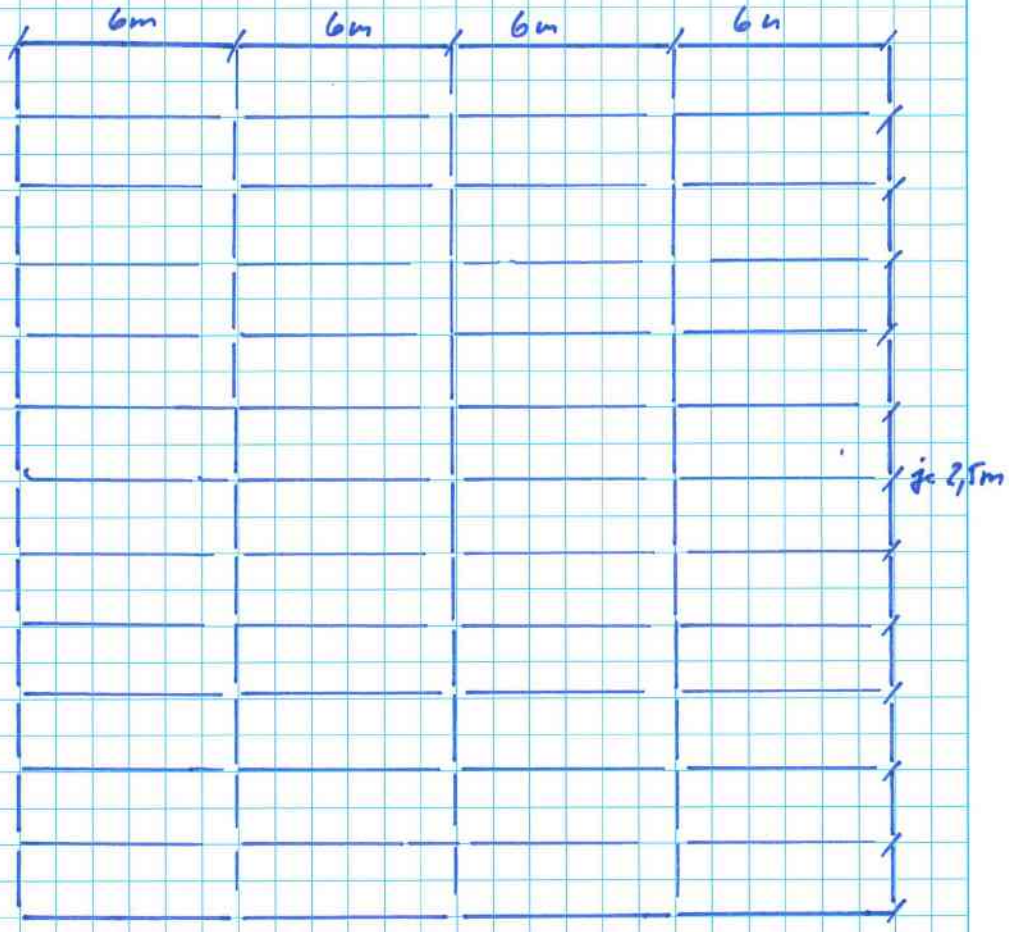
6. a.) $A = 48 \cdot 6m \cdot 2,5m$

$= 48 \cdot 15m^2$

$= \underline{720\ m^2}$ 1

b.) (3)



$u = 2 \cdot (4 \cdot 6m + 12 \cdot 2,5m)$

$= 2 \cdot (24m + 30m)$

$= 2 \cdot 54m = \underline{108m}$ 2

7.

$32\ m^3 = \underline{32'000\ dm^3}$

$0{,}75 \cdot 32'000\ dm^3 = \underline{24'000\ dm^3}$

$24'000\ dm^3 \cdot 0{,}8\ kg/dm^3 = \underline{19'200\ kg}$

$19'200\ kg + 2'300\ kg = \underline{21'500\ kg}$

(2)

$48 \cdot 21'500\ kg = \underline{1'032'000\ kg} = \underline{1'032\ t}$ 2

$48 \cdot 21'500$

		9	6			
			4	8		
1	1	2	4	0	0	0
1	0	3	2	0	0	0

14 Pkte