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$$\begin{aligned} a) \quad 34 &= 2 \cdot 17 & \text{kgV} &= 2 \cdot 5 \cdot 17 = \underline{\underline{170}} \\ 85 &= 5 \cdot 17 & \text{ggT} &= \underline{\underline{17}} \end{aligned}$$

$$\begin{aligned} b) \quad 210 &= 2 \cdot 3 \cdot 5 \cdot 7 & \text{kgV} &= 2 \cdot 3 \cdot 5 \cdot 7 \cdot 11 = \underline{\underline{2'310}} \\ 1'155 &= 3 \cdot 5 \cdot 7 \cdot 11 & \text{ggT} &= 3 \cdot 5 \cdot 7 = \underline{\underline{105}} \end{aligned}$$

$$\begin{aligned} c) \quad 270 &= 2 \cdot 3 \cdot 3 \cdot 3 \cdot 5 & \text{kgV} &= 2^3 \cdot 3^3 \cdot 5 = \underline{\underline{1'080}} \\ 216 &= 2 \cdot 2 \cdot 2 \cdot 3 \cdot 3 \cdot 3 & \text{ggT} &= 2 \cdot 3^3 = \underline{\underline{54}} \end{aligned}$$

$$\begin{aligned} d) \quad 10'000 &= 2 \cdot 2 \cdot 2 \cdot 2 \cdot 5 \cdot 5 \cdot 5 \cdot 5 = 2^4 \cdot 5^4 \\ 3'750 &= 2 \cdot 3 \cdot 5 \cdot 5 \cdot 5 \cdot 5 = 2 \cdot 3 \cdot 5^4 \\ \text{kgV} &= 2^4 \cdot 3 \cdot 5^4 = \underline{\underline{30'000}} \\ \text{ggT} &= 2 \cdot 5^4 = \underline{\underline{1250}} \end{aligned}$$

$$\textcircled{2} \quad 25s + 18 - (3(s-4) - 4(2s+1)) = 94$$

$$\underline{25s} + \underline{18} - \underline{3s} + \underline{12} + \underline{8s} + \underline{4} = 94$$

$$30s + 34 = 94$$

$$30s = 60$$

$$\underline{\underline{s = 2}}$$

$$\textcircled{3} \quad (3x+4)^2 - 9(x+1)^2 = 79$$

$$9x^2 + 24x + 16 - 9(x^2 + 2x + 1) = 79$$

$$\underline{9x^2} + \underline{24x} + \underline{16} - \underline{9x^2} - \underline{18x} - \underline{9} = 79$$

$$6x + 7 = 79$$

$$6x = 72$$

$$\underline{\underline{x = 12}}$$

$$\textcircled{4} \quad \frac{x-3}{2} + \frac{x+3}{5} = \frac{2x+6}{5} - x - 14 \quad | \cdot 10$$

$$\underline{5x} - 15 + \underline{2x} + 6 = \underline{4x} + 12 + \underline{10x} - 140$$

$$7x - 9 = 14x - 128$$

$$119 = 7x$$

$$\underline{\underline{17 = x}}$$

$$\textcircled{5} \quad \frac{4}{x-2} + \frac{12}{x+2} = \frac{32}{(x+2)(x-2)} \quad | \cdot (x+2)(x-2)$$

$$4(x+2) + 12(x-2) = 32$$

$$4x + 8 + 12x - 24 = 32$$

$$16x - 16 = 32$$

$$16x = 48$$

$$x = 3$$

6

$$2T + G = 105$$

$$5T + 7 = G$$

$$2T + 5T + 7 = 105$$

$$7T = 98$$

$$T = 14$$

$$G = 77$$

7

$$\begin{array}{r} 100 \cdot t + 90(t - \frac{1}{2}) = 140 \\ 100t + 90t - 45 = 140 \\ 190t = 185 \end{array}$$

$$\cancel{100t + 50 + 90t = 140}$$

$$100(t - 1/2) + 90t = 140$$

$$100t - 50 + 90t = 140$$

$$t = 1$$

$$\underline{90}$$

90/50 km