

Technische Mechanik - Uebungen 3

1.

$$A - (3 \times 3) - (3 + (2 \times 2)) = 9 - 7 = 2$$

$$B - 9 - (2 \times 4) = 1$$

$$C - 9 - ((2 \times 4) + 1) = 0$$

$$D - 9 - (2 \times 4) = 1$$

Answer: Nur A

2.

$$v_A = (r_1 + r_2)\omega e_x$$

$$v_B = -(r_2 - r_1)\omega e_x$$

Answer: e

3.

$$r_{GH} = -ae_x$$

$$v_G' = v_{Gx} = -v$$

$$v_{Hx}' = -v$$

$$\vec{\omega} \cdot \overrightarrow{v_G} = \vec{\omega} \cdot \overrightarrow{v_H}$$