

str. 33 / úloha 165,

1.

$$s_1 = ? \text{ [km]}$$

$$t_1 = 10 \text{ min} = 0,17 \text{ h}$$

$$v_1 = 63 \frac{\text{km}}{\text{h}}$$

$$s_2 = ? \text{ [km]}$$

$$t_2 = 5 \text{ min} = 0,083 \text{ h}$$

$$v_2 = 72 \frac{\text{km}}{\text{h}}$$

$$s_3 = 0 \text{ km}$$

$$t_3 = 10 \text{ min} = 0,17 \text{ h}$$

$$v_3 = 0 \frac{\text{km}}{\text{h}}$$

$$s_4 = ? \text{ [km]}$$

$$t_4 = 15 \text{ min} = 0,25 \text{ h}$$

$$v_4 = 54 \frac{\text{km}}{\text{h}}$$

$$v_{\text{pr}} = ? \left[\frac{\text{km}}{\text{h}} \right]$$

Řešení:

$$v_{\text{pr}} = \frac{s_c}{t_c}$$

$$s_c = s_1 + s_2 + s_3 + s_4$$
$$t_c = t_1 + t_2 + t_3 + t_4$$

$$\Delta_1 = v_1 \cdot A_1$$

$$\Delta_2 = v_2 \cdot A_2$$

$$\Delta_1 = 63 \cdot 0,17$$

$$\Delta_2 = 72 \cdot 0,083$$

$$\underline{\Delta_1 = 10,71 \text{ km}}$$

$$\underline{\Delta_2 = 5,976 \text{ km}}$$

$$\underline{\Delta_3 = 0 \text{ km}}$$

$$\Delta_4 = v_4 \cdot A_4$$

$$\Delta_4 = 54 \cdot 0,25$$

$$\underline{\Delta_4 = 13,5 \text{ km}}$$

$$\Delta_c = \Delta_1 + \Delta_2 + \Delta_3 + \Delta_4$$

$$\Delta_c = 10,71 + 5,976 + 0 + 13,5$$

$$\underline{\Delta_c = 30,186 \text{ km}}$$

$$\Delta_c = A_1 + A_2 + A_3 + A_4$$

$$\Delta_c = 0,17 + 0,083 + 0,17 + 0,25$$

$$\underline{\Delta_c = 0,673 \text{ h}}$$

$$v_p = \frac{A_c}{A_c}$$

$$v_p = \frac{30,186}{0,673}$$

$$v_p = 44,85 \frac{\text{km}}{\text{h}}$$

$$\underline{\underline{v_p = 45 \frac{\text{km}}{\text{h}}}}$$

Průměrná rychlost automobilu je $45 \frac{\text{km}}{\text{h}}$.