

Úloha 45

Podmínky řešitelnosti:

$$(v_b \leq a) \wedge \left(v_b \leq u_b < \frac{v_b \sqrt{2a}}{\sqrt{a - \sqrt{a^2 - v_b^2}}} \right) \wedge \left[(u_b \neq a) \vee \left(\frac{\sqrt{3}}{2} a < v_b < a \right) \right]$$

Počet řešení:

$$1, \text{ je-li } \left\{ (v_b < a) \wedge \left[(u_b = v_b) \vee (u_b = a) \vee \left(u_b \geq \frac{v_b \sqrt{2a}}{\sqrt{a - \sqrt{a^2 - v_b^2}}} \right) \right] \right\} \vee (v_b = a)$$

$$2, \text{ je-li } (v_b < a) \wedge (u_b > v_b) \wedge (u_b \neq a) \wedge \left(u_b < \frac{v_b \sqrt{2a}}{\sqrt{a - \sqrt{a^2 - v_b^2}}} \right)$$