

'Can They Be Equal?'

Perimeter

$$P = 2a + 2b$$

Area

$$A = a \cdot b$$



$$2a + 2b = a \cdot b$$

I can choose a and then Find b .

• $a = 6$

$$2 \cdot 6 + 2 \cdot b = 6 \cdot b$$

$$12 = 4 \cdot b$$

$b = 3, P = 18, A = 18$

• $a = 4, b = 4$

• $a = 7, b = \frac{14}{5}$

• $a = 5, b = \frac{10}{3}$

• $a = 8, b = \frac{8}{3}$

• $a = 10, b = \frac{5}{2}$

There are infinitely many ways how to choose a and thus infinitely many such rectangles.

Knyštůf