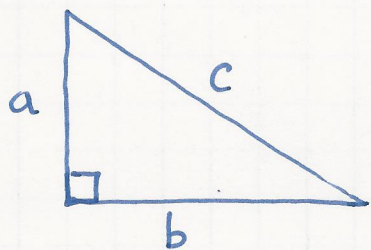


Remark!

c is the hypotenuse. The diagram becomes



$$a+c=49$$

$$A=? \quad A = \frac{ab}{2}$$

Also: $a^2 + b^2 = c^2$, $c = 49 - a$

$$(49-a)^2 = c^2$$

$$49^2 - 2(49)(a) + a^2 = b^2 + a^2, \quad b^2 = 49(49-2a)$$

$$b^2 = 49(49-2a)$$

$$49-2a > 0, \quad 2a < 49, \quad a < \frac{49}{2}, \quad a \leq 24 \text{ since } a \in \mathbb{Z}$$

$$\therefore 1 \leq a \leq 24$$

Also $49-2a$ is a perfect square, less than 49

$$49-2a \leq 36$$

We consider cases:

$49-2a$	a	c	b	
1	24	25	7	$\times a \neq b$
4	\times			a not an integer
9	20	29	21	
16	\times			a not an integer
25	12	37	35	
36	\times			a not an integer.

$$A_1 = \frac{(20)(21)}{2} = 210 u^2$$

$$A_2 = \frac{(12)(35)}{2} = 210 u^2$$