② let x represent the first number,

then $(x+6)$ represents the 2nd number.

$$x^2+(x+6)^2=146$$

$$x^2+x^2+12x+36=146$$

$$2x^2+12x+36=146$$

$$2x^2+12x+36-146=0$$

$$2x^2+12x-110=0$$

$$2(x^2+6x-55)=0$$

$$2(x+11)(x-5)=0$$

$2\neq 0$, $x+11=0$ or $x-5=0$

$x=-11$ or $x=5$

$x=(-11)$, $x+6=-11+6$

$=(-5)$

$x=5$, $x+6=5+6=11$

∴ the numbers are -11, -5 or 5 and 11.