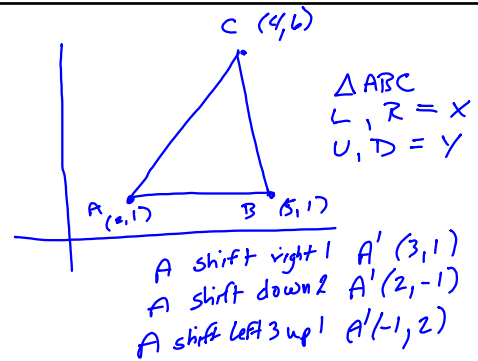


4.3 Translations

Changing the location
 \rightarrow not changing size
 \rightarrow not changing orientation

slide

Translations in Geometry
Notation

describes the change in (x, y)

$$(x, y) \rightarrow (x + a, y + b)$$

shift left 3

$$(x, y) \rightarrow (x - 3, y)$$

shift right 2 down 4

$$(x, y) \rightarrow (x + 2, y - 4)$$

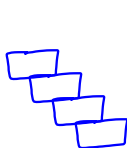
$$P(4, 2) \quad (x, y) \rightarrow (x - 1, y + 2)$$

$$P'(3, 4)$$

$$P(-2, 5) \quad (x, y) \rightarrow (x + 7, y - 7)$$

$$P'(15, -2)$$

Translational Symmetry



checker board
Black Squares

cinder blocks