

TRANSFORMATIONS

TRANSLATION → SLIDE

Translate right → $(x + \#, y)$

Translate left → $(x - \#, y)$

Translate up → $(x, y + \#)$

Translate down → $(x, y - \#)$

REFLECTION → FLIP

Across x-axis → $(x, -y)$ Change the Sign of y

Across y-axis → $(-x, y)$ Change the Sign of x

Across $y = x$ → (y, x) Swap Both

Across $y = -x$ → $(-y, -x)$ Change Both Signs & Swap

ROTATION → TURN

90 CW & 270 CCW → $(y, -x)$ Change Sign of x & Swap

90 CCW & 270 CW → $(-y, x)$ Change Sign of y & swap

180 either way → $(-x, -y)$ Change Both Signs