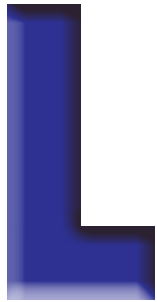


Pentomino Rotations: A Matter of Revolution & Degree

For each problem, look at the first pentomino position and its rotation. For the 2nd, 3rd and 4th pentominoes in the row, record the Revolution ($1/4$, $1/2$, or $3/4$) & Degree (90° , 180° , 270°) the shape has been rotated.

On Page 3, you decide the rotational direction. Each solution must be unique (see page 3, second row).

Note: Use concrete pentominoes to help you when learning about Clockwise and Counterclockwise Rotations.



Clockwise Rotations



Revolution Degrees



Revolution Degrees



Revolution Degrees



Clockwise Rotations



Revolution Degrees



Revolution Degrees



Revolution Degrees



Counter-Clockwise Rotations



Revolution Degrees



Revolution Degrees



Revolution Degrees

Pentomino Rotations 2: A Matter of Revolution & Degree



Counter-Clockwise Rotations



Revolution Degrees



Revolution Degrees



Revolution Degrees



Clockwise Rotations



Revolution Degrees



Revolution Degrees



Revolution Degrees



Counter-Clockwise Rotations



Revolution Degrees



Revolution Degrees



Revolution Degrees

Pentomino Rotations 3: A Matter of Revolution & Degree



Revolution Degrees



Revolution Degrees



Revolution Degrees



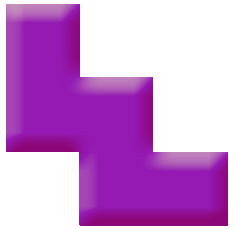
Revolution Degrees



Revolution Degrees



Revolution Degrees



Revolution Degrees



Revolution Degrees



Revolution Degrees



Revolution Degrees



Revolution Degrees

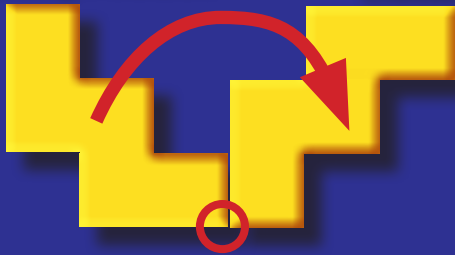


Revolution Degrees

DEGREES OF ROTATIONS

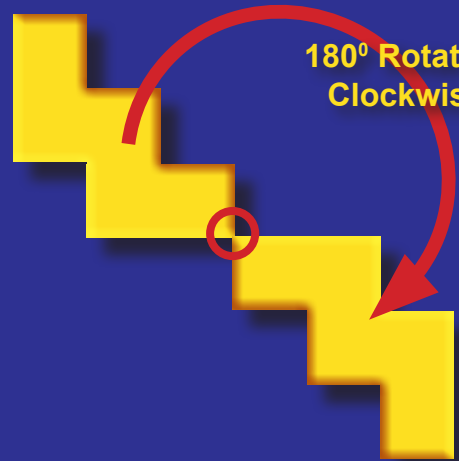
Starting Position

90° Rotation
Clockwise



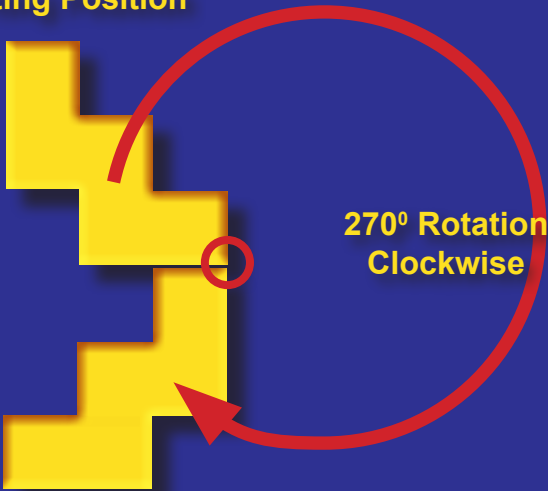
Starting Position

180° Rotation
Clockwise



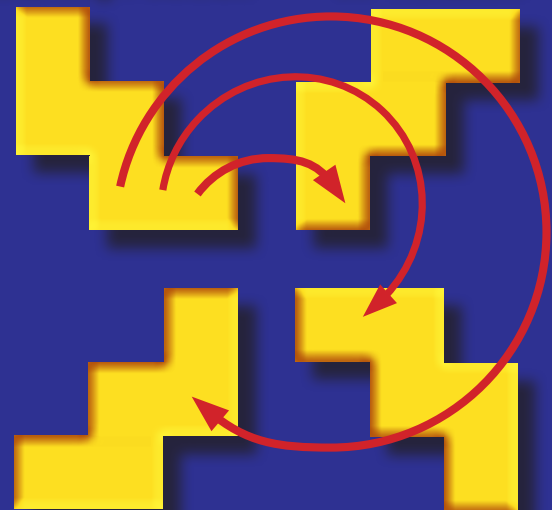
Starting Position

270° Rotation
Clockwise



Starting Position

90° Rotation



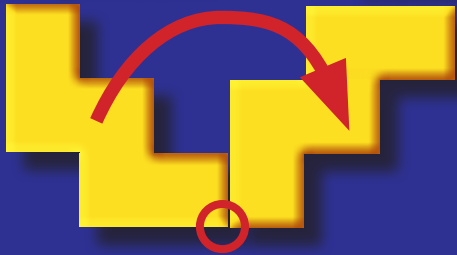
270° Rotation

180° Rotation

REVOLUTIONS OF ROTATIONS

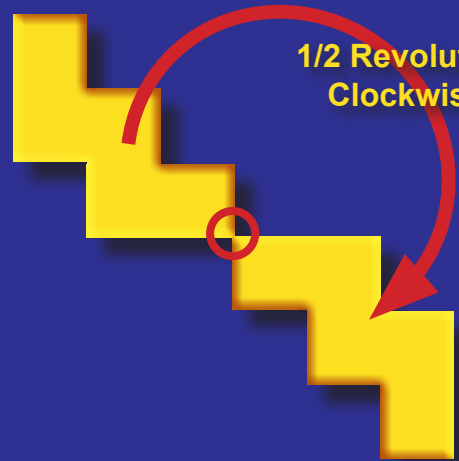
Starting Position

1/4 Revolution
Clockwise



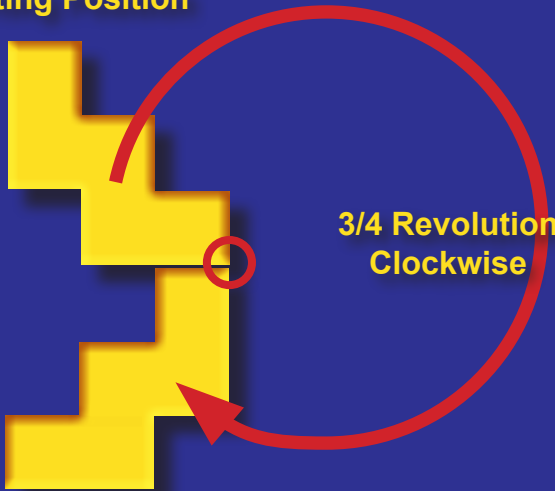
Starting Position

1/2 Revolution
Clockwise



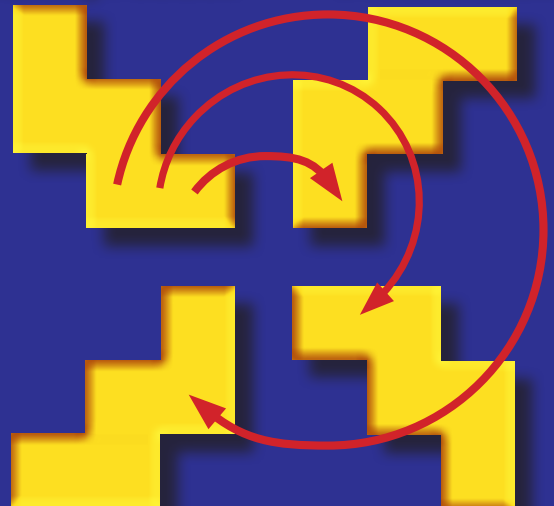
Starting Position

3/4 Revolution
Clockwise



Starting Position

1/4 Revolution



3/4 Revolution

1/2 Revolution