Goal: I will be able to $\qquad$

Tool Bag
Formulas, equations, vocabulary, etc.
Rotation
Center of Rotation
Angle of Rotation

## Here's How...Notes \& Examples

## Example 1

Which of the following is a rotation?




Angle of Rotation


Rectangle $A B C D$ has coordinates $A(1,2), B(1,0), C(5,0)$, \& $D(5,2)$
a) Rotate $\mathrm{ABCD} 90^{\circ}$ about the origin, and draw it there.
b) Rotate ABCD $180^{\circ}$ about the origin, and draw it there.
c) Rotate $\mathrm{ABCD} 270^{\circ}$ about the origin, and draw it there.
d) Use arrow notation to describe the rotation of $A B C D$.


| Angle of Rotation | Original <br> Coordinate |  | Rotated <br> Coordinate |
| :---: | :---: | :--- | :--- |
| $90^{\circ}$ | $A(1,2)$ |  |  |
|  | $B(1,0)$ |  |  |
|  | $C(5,0)$ |  |  |
| $180^{\circ}$ | D (5,2) |  |  |
|  | $B(1,2)$ |  |  |
|  | $C(5,0)$ |  |  |
| $270^{\circ}$ | D (5,2) |  |  |
|  | $B(1,2)$ |  |  |
|  | $C(5,0)$ |  |  |
|  | $D(5,2)$ |  |  |
|  |  |  |  |
|  |  |  |  |

