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| **Rotations** |  |
| 1 | Rotate this shape 900 clockwise around the point **P**

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|   |   |   |   |  P |   |   |   |   |   |   |   |   |   |
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  | 4 | Rotate this shape by 900 clockwise through the origin.***y***

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|   |   |   |   |   |  ***5*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***4*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***3*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***2*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***1*** |   |   |   |   |   |   |
|  ***-5******-4*** |   |  ***-3*** |  ***-2*** |  ***-1*** |  ***0*** |  ***1*** |  ***2*** |  ***3*** |  ***4*** |  ***5*** |  ***x*** |
|   |   |   |   |  ***-1*** |   |   |   |   |   |   |   |
|   |   |   |   |  ***-2*** |   |   |   |   |   |   |   |
|   |   |   |   |  ***-3*** |   |   |   |   |   |   |   |
|   |   |   |   |  ***-4*** |   |   |   |   |   |   |   |
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 |
| 2 | Rotate this shape 1800 around the point **P**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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 | 5 | Rotate this shape by 1800 through the centre (-1, -2)***y***

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|   |   |   |   |   |  ***5*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***4*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***3*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***2*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***1*** |   |   |   |   |   |   |
|  ***-5******-4*** |   |  ***-3*** |  ***-2*** |  ***-1*** |  ***0*** |  ***1*** |  ***2*** |  ***3*** |  ***4*** |  ***5*** |  ***x*** |
|   |   |   |   |  ***-1*** |   |   |   |   |   |   |   |
|   |   |   |   |  ***-2*** |   |   |   |   |   |   |   |
|   |   |   |   |  ***-3*** |   |   |   |   |   |   |   |
|   |   |   |   |  ***-4*** |   |   |   |   |   |   |   |
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 |
| 3 | Rotate this shape 900 anti-clockwise around the point **P**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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 | 6 | Describe the transformation that maps shape A to shape B***y***

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|   |   |   |   |   |  ***5*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***4*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***3*** |   |   |   |   |   |   |
|   |   |   |   |   |  ***2*** |   |   |  B |   |   |   |
|   |   |   |   |   |  ***1*** |   |   |   |   |   |   |
|  ***-5******-4*** |   |  ***-3*** |  ***-2*** |  ***-1*** |  ***0*** |  ***1*** |  ***2*** |  ***3*** |  ***4*** |  ***5*** |  ***x*** |
|   |   |   |   |  ***-1*** |   |   |   |   |   |   |   |
|   |   |   |   |  ***-2*** |   |   |   |  A |   |   |   |
|   |   |   |   |  ***-3*** |   |   |   |   |   |   |   |
|   |   |   |   |  ***-4*** |   |   |   |   |   |   |   |
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