## TRIBAL TRANSFORMATIONS

## Question 1

Below is an arrow symbol from a Plains-style quilt design. Quadrant I shows the unshaded preimage (image 1), and Quadrant II shows image 2. Label the corresponding points on image 2 and complete the table below.


| Preimage | Image 2 |
| :---: | :---: |
| $A(1,6)$ |  |
| $B(2,6)$ |  |
| $C(5,3)$ |  |
| $D(6,2)$ |  |
| $E(5,1)$ |  |
| $F(4,2)$ |  |
| $G(1,5)$ |  |

1) Do your best to write an algebraic rule to describe the relationship between the preimage and image 2.
2) How would you describe what happened visually when the preimage was transformed into image 2?

## Question 2

Quadrant I shows the unshaded preimage (image 1), Quadrant III shows image 3. Label the corresponding points on image 3 and complete the table below.


| Preimage | Image 3 |
| :---: | :---: |
| $A(1,6)$ |  |
| $B(2,6)$ |  |
| $C(5,3)$ |  |
| $D(6,2)$ |  |
| $E(5,1)$ |  |
| $F(4,2)$ |  |
| $G(1,5)$ |  |

3) Do your best to write an algebraic rule to describe the relationship between the preimage and image 3.
4) How would you describe what happened visually when the preimage was transformed into image 3?

## Question 3

Quadrant I shows the unshaded preimage (image 1), and Quadrant IV shows image 4. Label the corresponding points on image 4 and complete the table below.


| Preimage | Image 4 |
| :---: | :---: |
| $A(1,6)$ |  |
| $B(2,6)$ |  |
| $C(5,3)$ |  |
| $D(6,2)$ |  |
| $E(5,1)$ |  |
| $F(4,2)$ |  |
| $G(1,5)$ |  |

5) Do your best to write an algebraic rule to describe the relationship between the preimage and image 4.
6) How would you describe what happened visually when the preimage was transformed into image 4?
