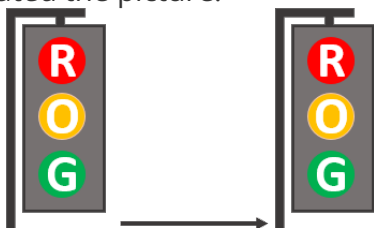


Transforming traffic lights

This task is about properties of shapes that change or don't change under transformation. The picture of traffic lights was given to 4 students.



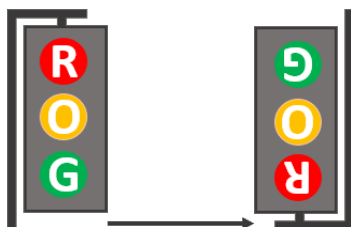
a) Pete *translated* the picture.



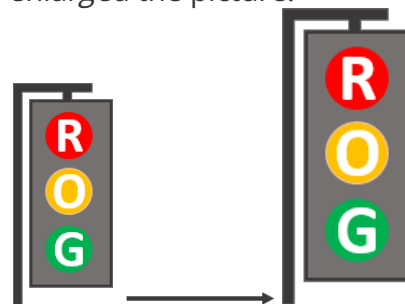
b) Hoani *reflected* the picture.



c) Jemma *rotated* the picture 180°.



d) Maria *enlarged* the picture.



Complete the table below to show which properties are **invariant** (do not change) and which properties change under each of the transformations. [Select *invariant* or *changes*]

Invariant Properties			
Transformation	Length	Area	Angle Size
a) Translation	<i>invariant</i> / <i>changes</i>	<i>invariant</i> / <i>changes</i>	<i>invariant</i> / <i>changes</i>
b) Reflection	<i>invariant</i> / <i>changes</i>	<i>invariant</i> / <i>changes</i>	<i>invariant</i> / <i>changes</i>
c) Rotation	<i>invariant</i> / <i>changes</i>	<i>invariant</i> / <i>changes</i>	<i>invariant</i> / <i>changes</i>
d) Enlargement	<i>invariant</i> / <i>changes</i>	<i>invariant</i> / <i>changes</i>	<i>invariant</i> / <i>changes</i>