## Student Activity Enlargements 1

Use in connection with the interactive file "Enlargements 1" on the Student's CD.
$\mathrm{g}=2$


Move the slider $\mathbf{g}$, which represents the enlargement factor and watch the image

1. What point is the centre of enlargement in the interactive file?
2. When $\mathrm{g}=3$ complete the table by measuring the lengths on the screen with a ruler.

| $A B$ |  | $A C$ |  | $B C$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $A^{\prime} B^{\prime}$ |  | $A^{\prime} C^{\prime}$ |  | $B^{\prime} C^{\prime}$ |  |

3. Do you notice any relationship between the corresponding sides in Question 2 and if so what is the relationship?
$\qquad$
$\qquad$
4. Now move the slider in the interactive file to $\mathrm{g}=4$ and complete the table.

| $A B$ |  | $A C$ |  | $B C$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $A^{\prime} B^{\prime}$ |  | $A^{\prime} C^{\prime}$ |  | $B^{\prime} C^{\prime}$ |  |

What relationship did you notice between the corresponding sides?
$\qquad$
$\qquad$
5. When $g$ the enlargement factor is 1 , what happens to the image?

Note questions 6, 7 and 8 do not need the interactive file.
6. Find the image of the triangle $A B C$ under an enlargement with $D$ as centre and a scale factor of 2.
D•

7. Find the centre of enlargement, if $A^{\prime} B^{\prime} C^{\prime}$ is the image of $A B C$ under an enlargement.

8. If the scale factor is 2 , find the lengths of the sides of the image:


| $A B$ | 1.8 | $A^{\prime} B^{\prime}$ |  |
| :---: | :--- | :--- | :--- |
| $B C$ | 1.3 | $B^{\prime} C^{\prime}$ |  |
| $A C$ | 2.2 | $A^{\prime} C^{\prime}$ |  |

