| Learning Objective: | To be able to enlarge a shape and to be able to <br> describe enlargements. | Date: |  |
| :--- | :--- | :--- | :--- |

## Do NOW Activity:

1. Calculate $47 \times 123$
2. Write the ratio $12: 16$ in its simplest form
3. How many sides does a pentagon have?
4. What is $15 \%$ of 84 ?
5. Simplify: $5 a+4 a-3 a+2 a$
6. What are the next two terms? Explain

$$
\begin{array}{llll}
7 & 11 & 15 & 19
\end{array}
$$

NOTES: (If needed, make any notes to help you answer similar questions next week)

## PRIOR KNOWLEDGE CHECK:

You will need to be able to plot coordinates. If you need help with this (we will check during the lesson) please ask for help.

## THE MAIN EVENT

Worked example 1.

Enlarge the below shape using a scale factor of 2.


Now try this:

Enlarge the below shape using a scale factor of 3.


## Notes:

Worked example 2.

Enlarge the below shape using a scale factor of 2, with a centre of enlargement of $(0,1)$


Now try this:

Enlarge the below shape using a scale factor of 3, with a centre of enlargement of (3.2)


Notes:

## Worked example 3:

On the grid enlarge the shape with a scale factor of $\frac{1}{2}$ centre $(3,2)$.


Now try this:

Enlarge shape A by scale factor $\frac{1}{3}$ centre $(0,1)$


## Notes:

Worked Example 4.
Describe fully the single transformation that maps shape $P$ onto shape Q .


Now try this:
Describe fully the single transformation that maps shape B onto shape A.


## Notes:

## R.A.G. Questions

Enlarge the below shape using a scale factor of 2, with a centre of enlargement of $(1,3)$


Describe fully the single transformation that maps shape Q onto shape P.


When considering your effort think about whether you have followed all instructions, made notes, marked your work and completed all the work that you were asked to do.

| EFFORT | UNDERSTANDING |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| RED | AMBER | GREEN | 1 | 2 |

## NOTES

