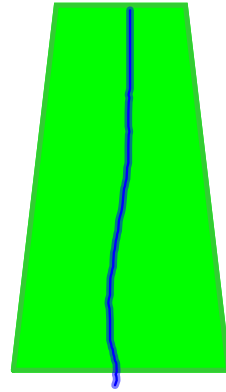
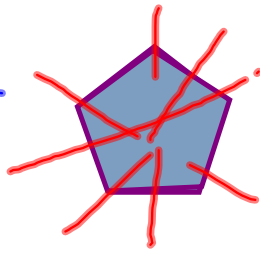
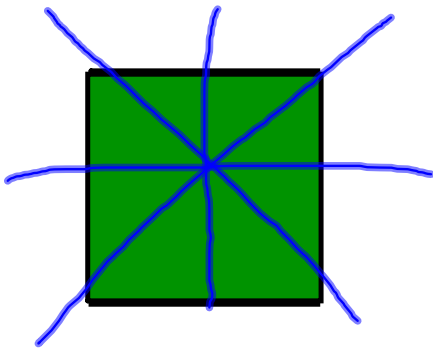


## Reflectional Symmetry

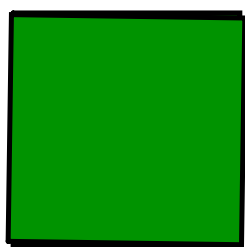
Draw in the lines of symmetry: *bray-zium*



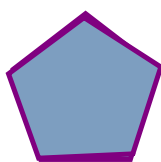
## Rotational Symmetry

Order: how many times can I turn it?

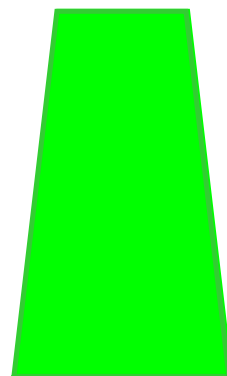
Looking at order:



order 4

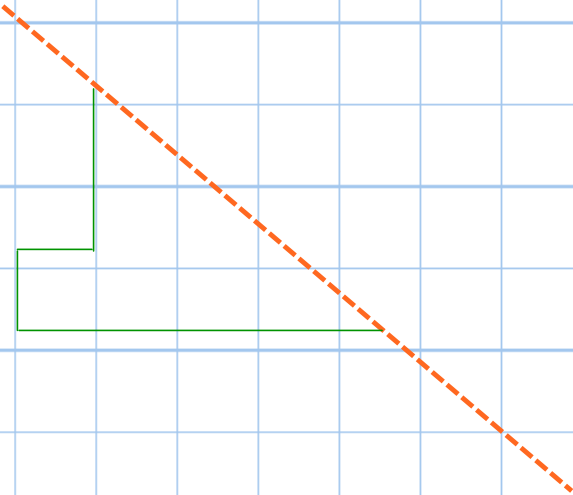
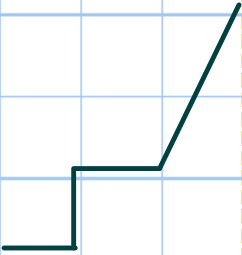
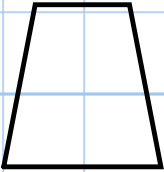
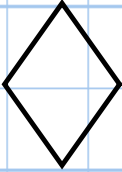
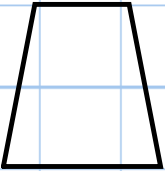


order 5

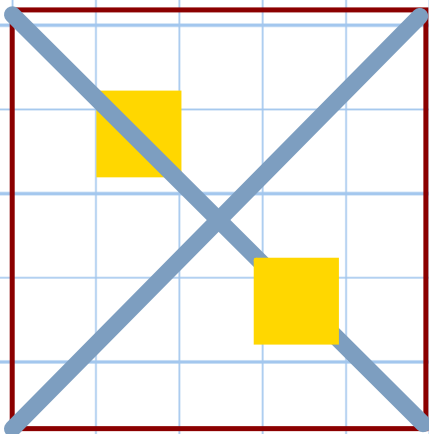
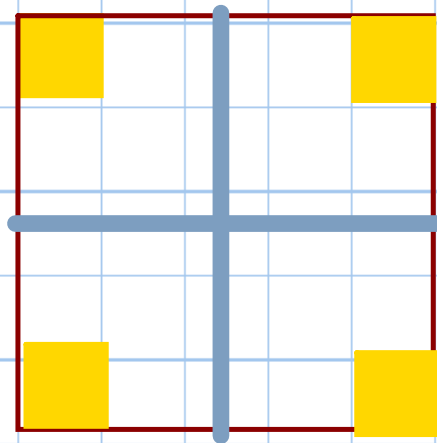
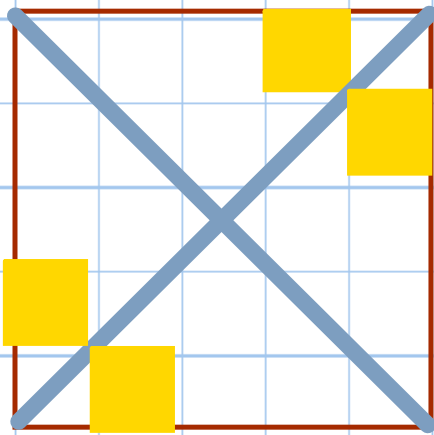
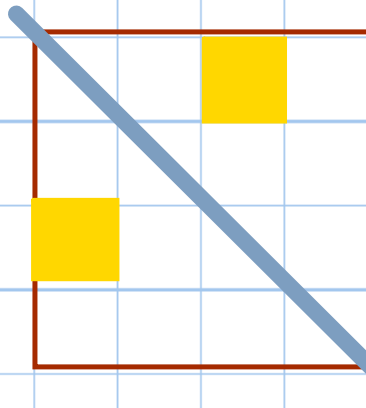
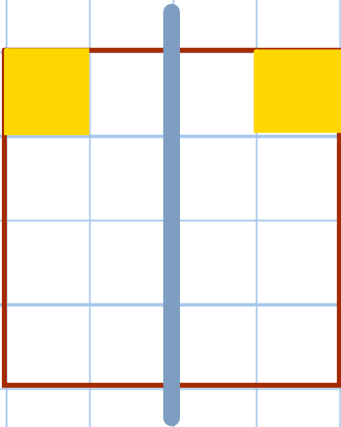
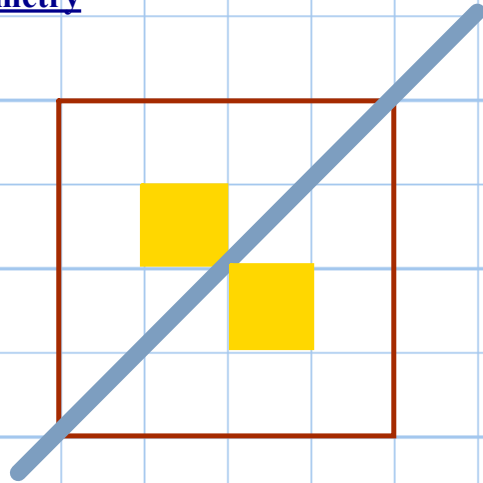
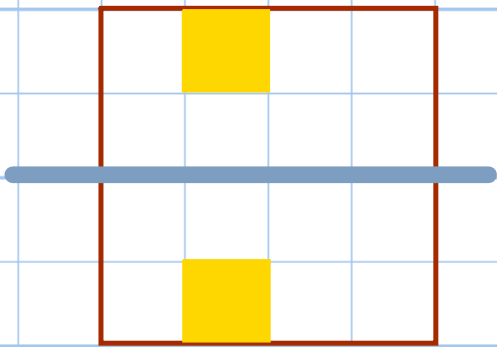


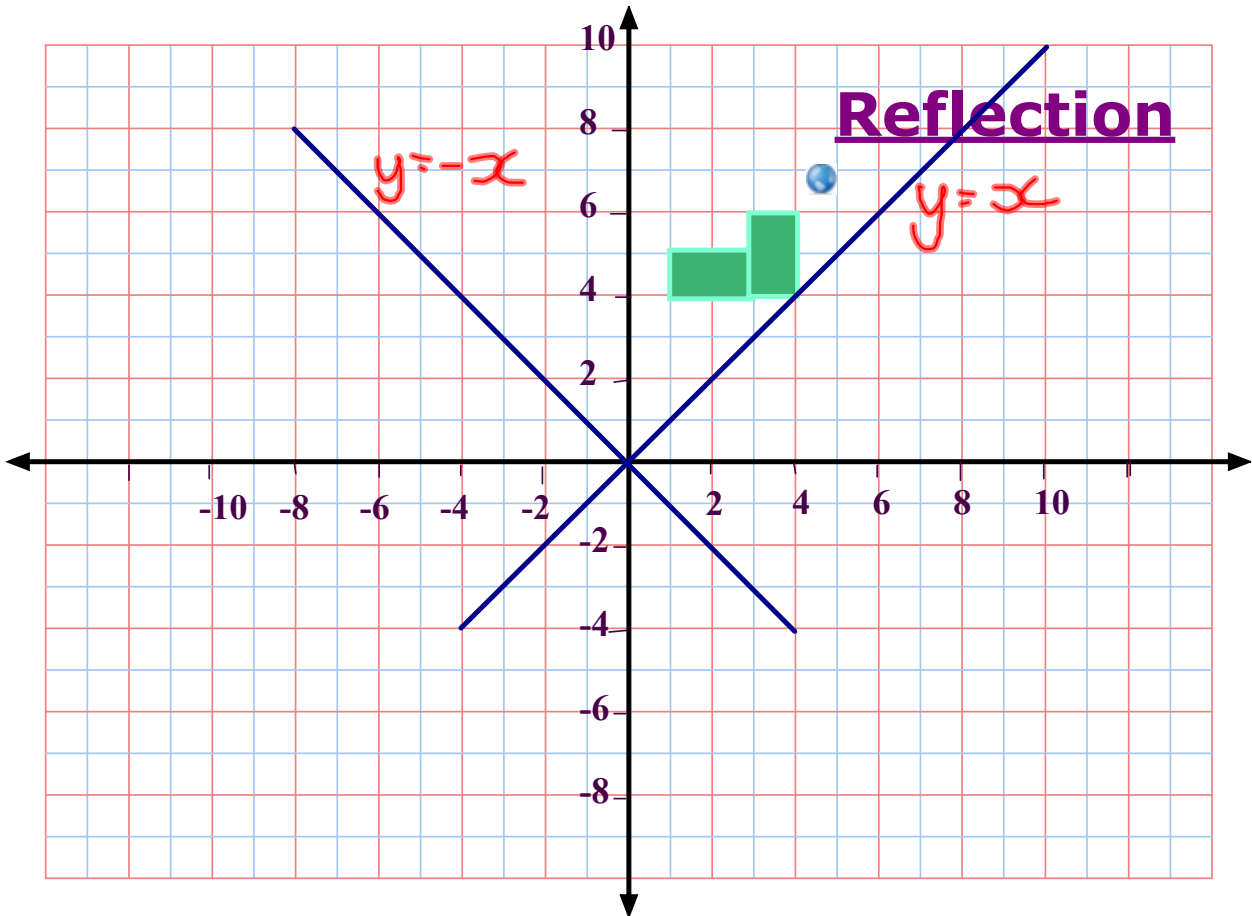
order 1

# Reflection



# Reflectional Symmetry

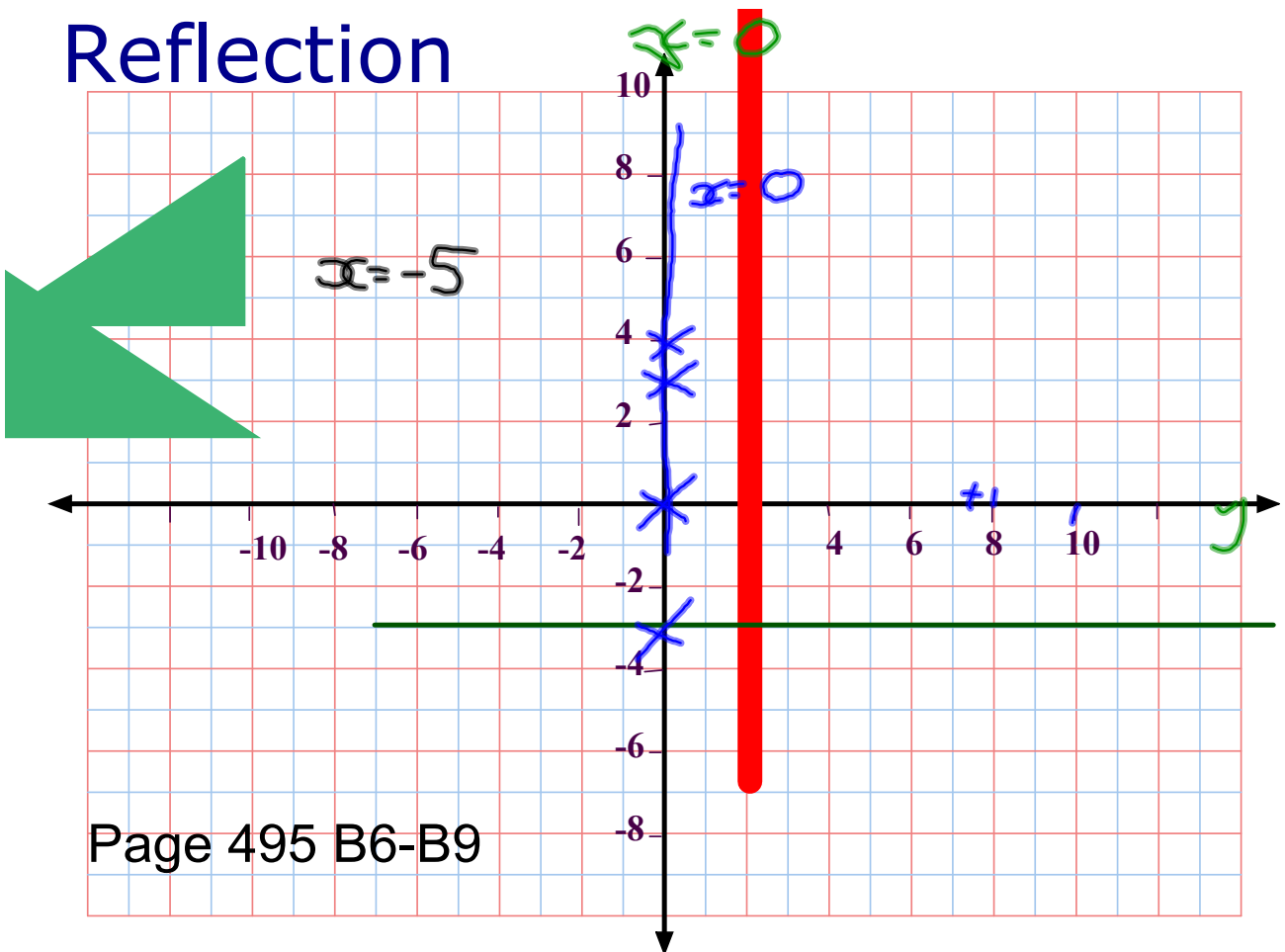




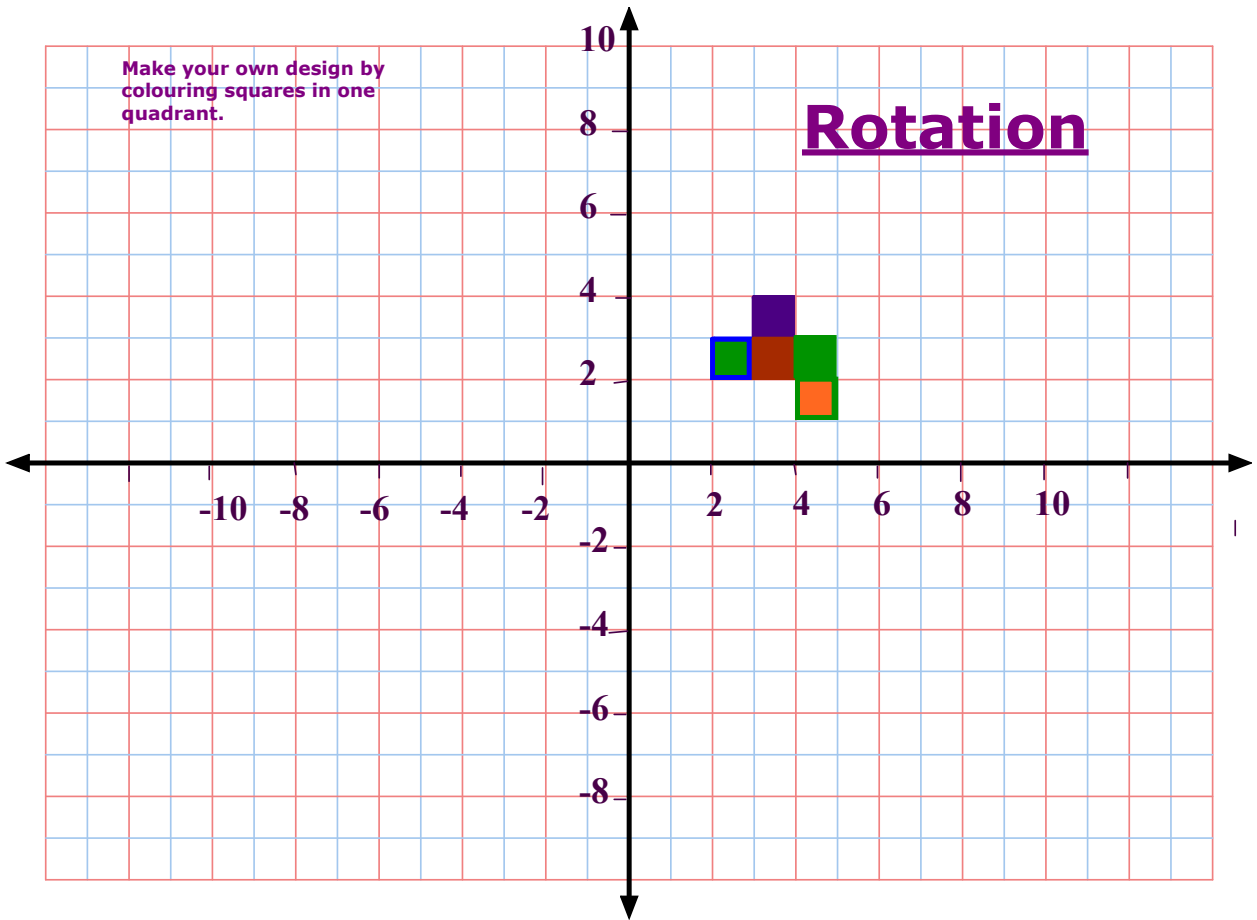
Draw a shape made from rectangles. Reflect in each of the axes.  
Page 494

c grade question page 113 red book

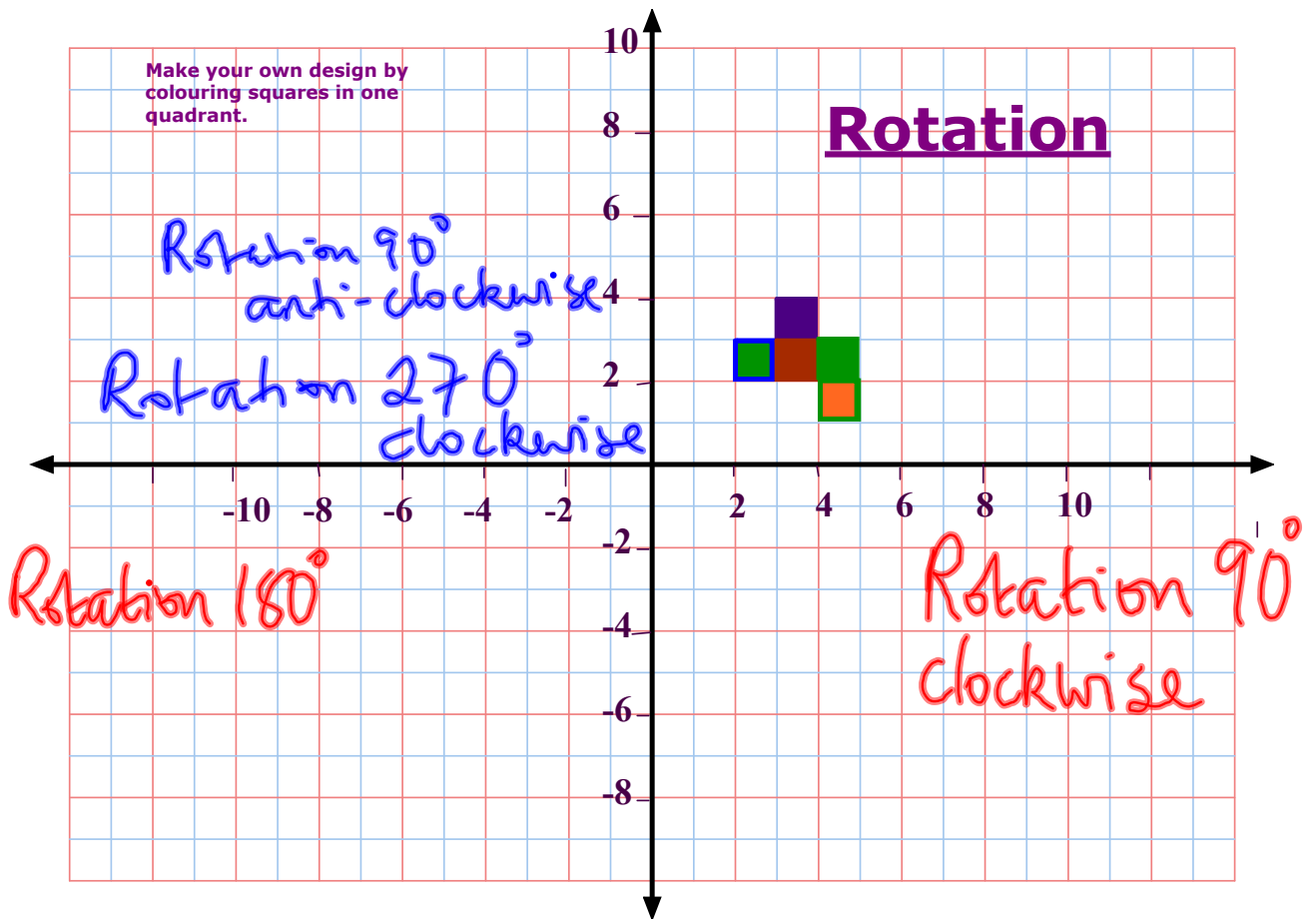
# Reflection



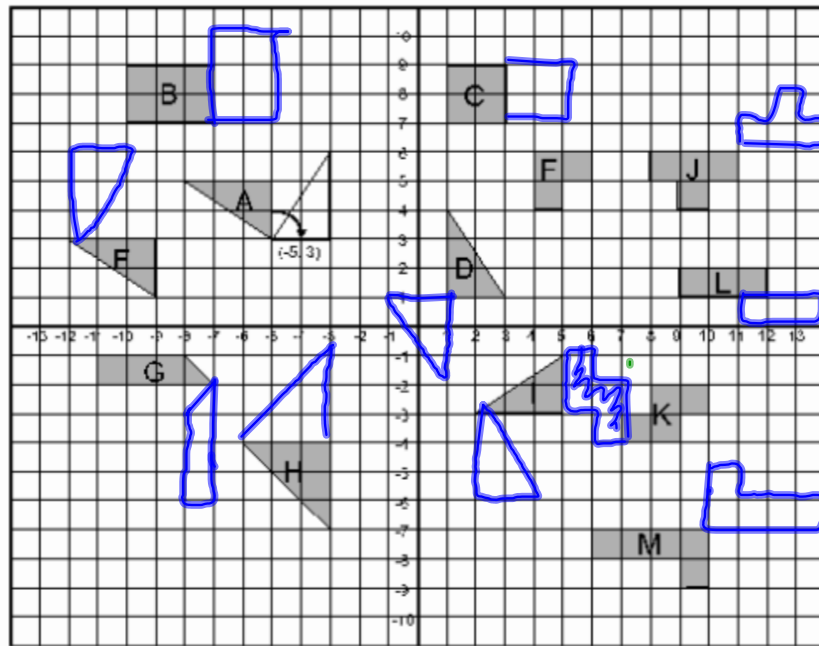
Page 495 B6-B9



Page 498



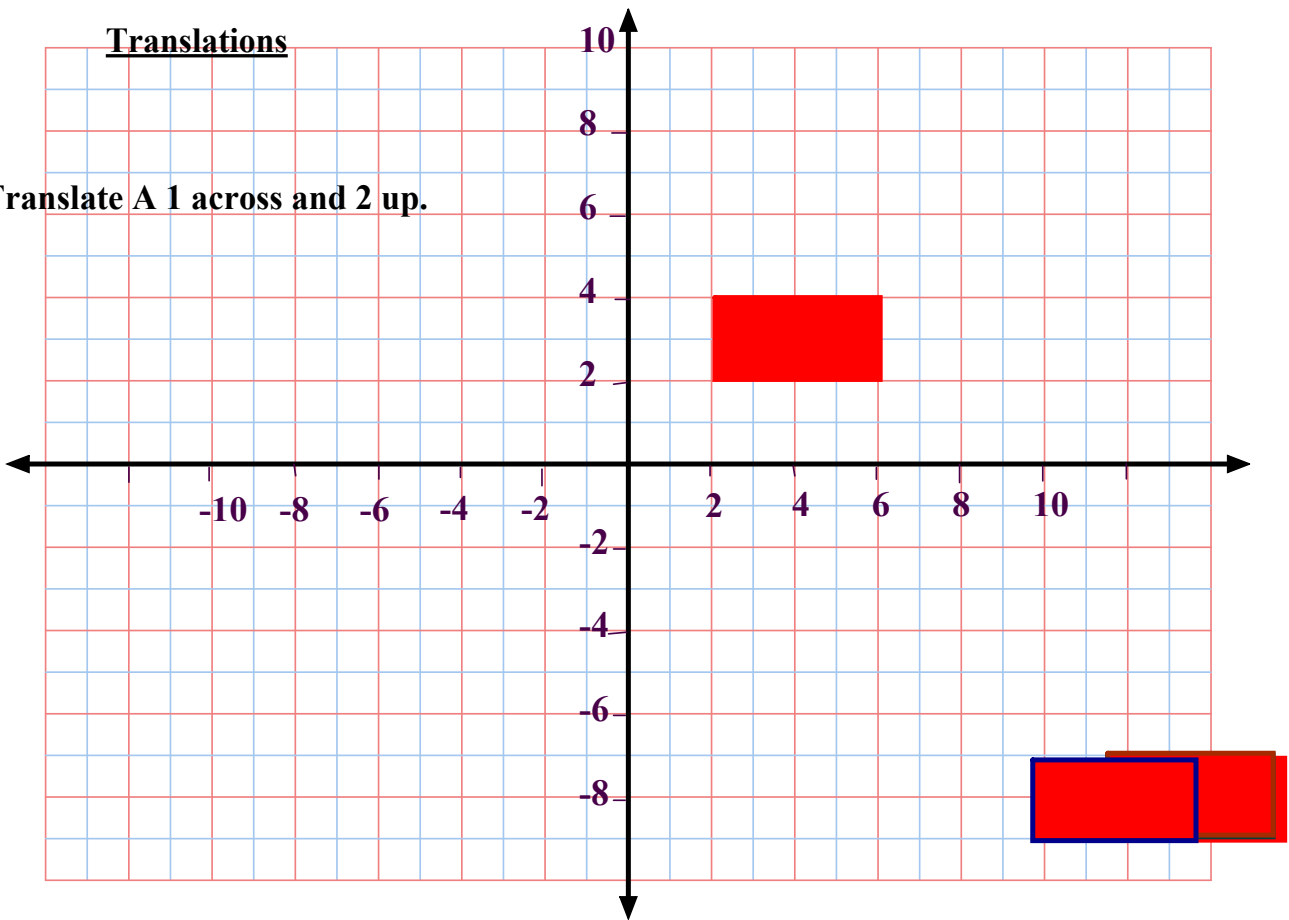
$\frac{1}{4}$	clockwise
$\frac{1}{4}$	clockwise
$\frac{1}{4}$	anti-clockwise
$\frac{1}{2}$	anti-clockwise
$\frac{1}{4}$	anti-clockwise
$\frac{1}{2}$	clockwise
$\frac{1}{4}$	anti-clockwise
$\frac{3}{4}$	anti-clockwise
$\frac{1}{4}$	clockwise
$\frac{1}{2}$	
$\frac{1}{4}$	anti-clockwise
$\frac{1}{2}$	
$\frac{1}{2}$	



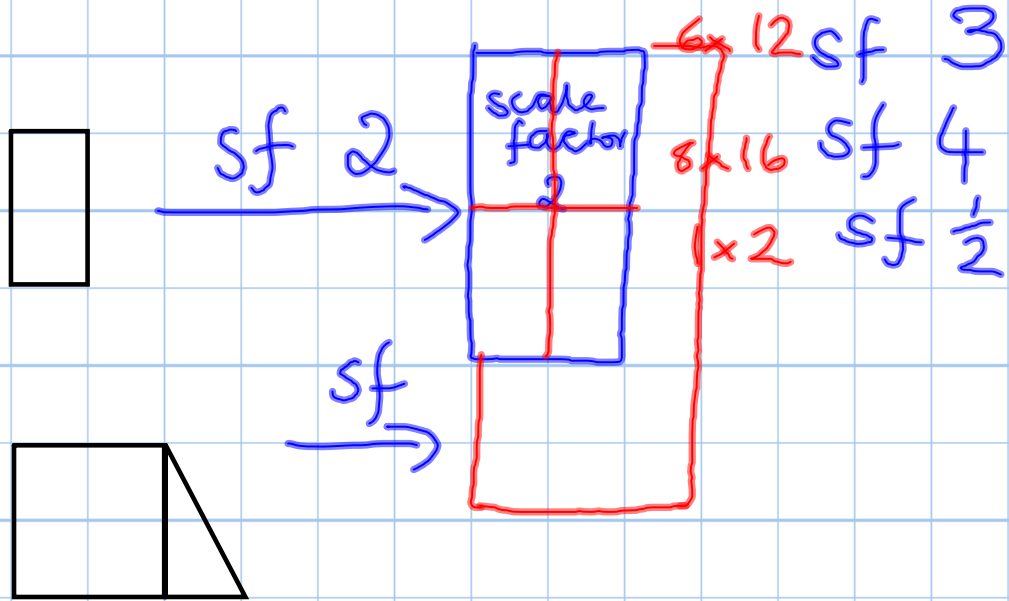
© FBKC SM\_E 2001

Translations

Translate A 1 across and 2 up.



## Enlargement

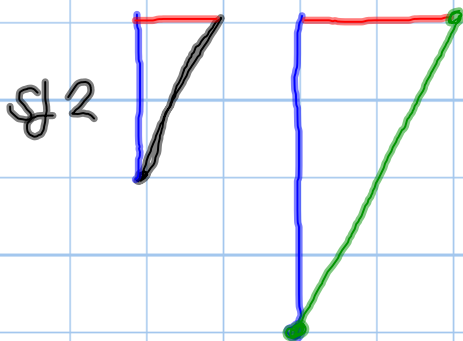


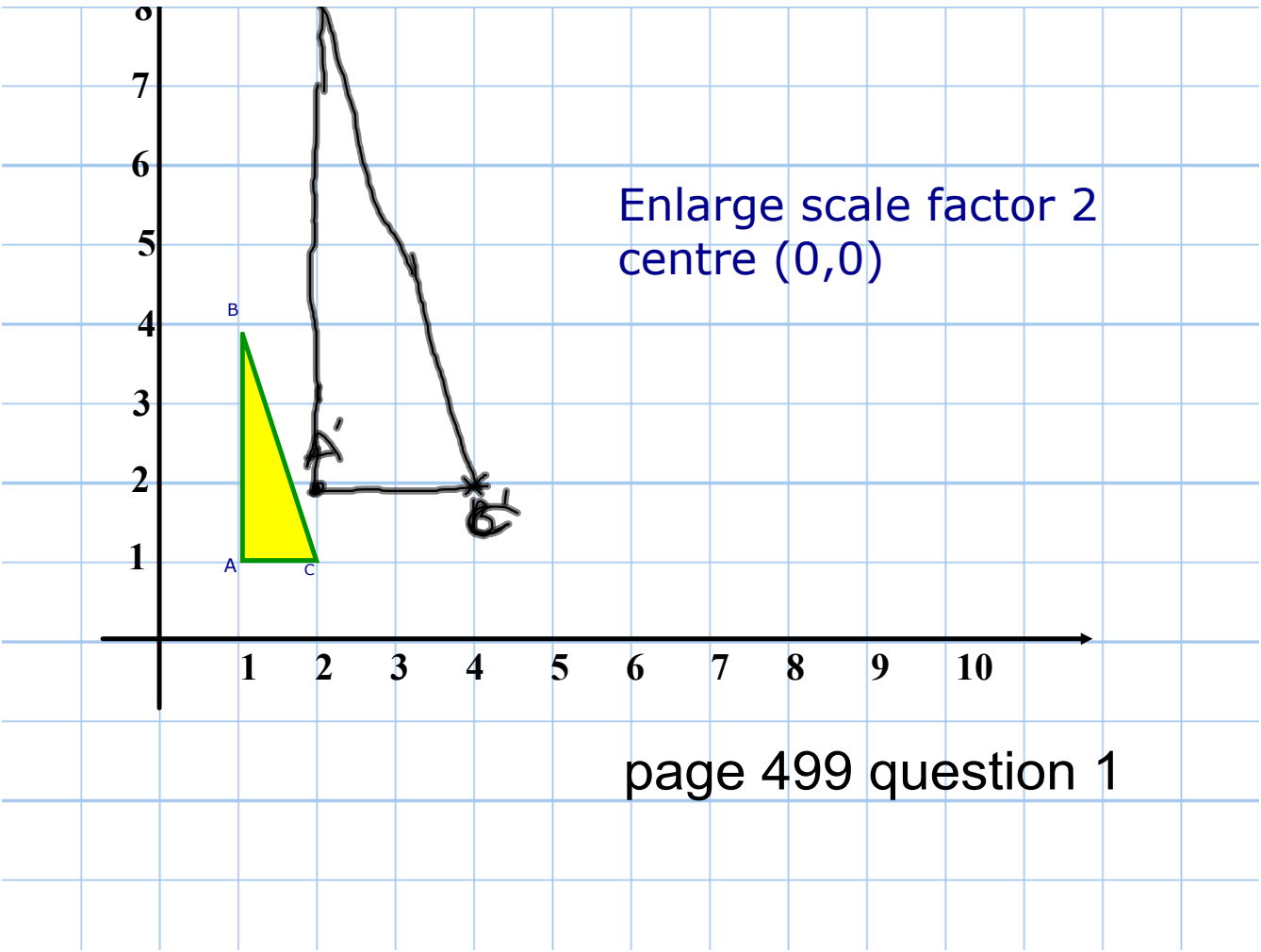
**Enlargement is measured using a scale factor. The scale factor tells you what to multiply the lengths by.**

**For example: Scale factor 2 means double all the lengths**

**scale factor 3 means triple all the lengths**

**scale factor 4 means times all the lengths by 4 and so on..**

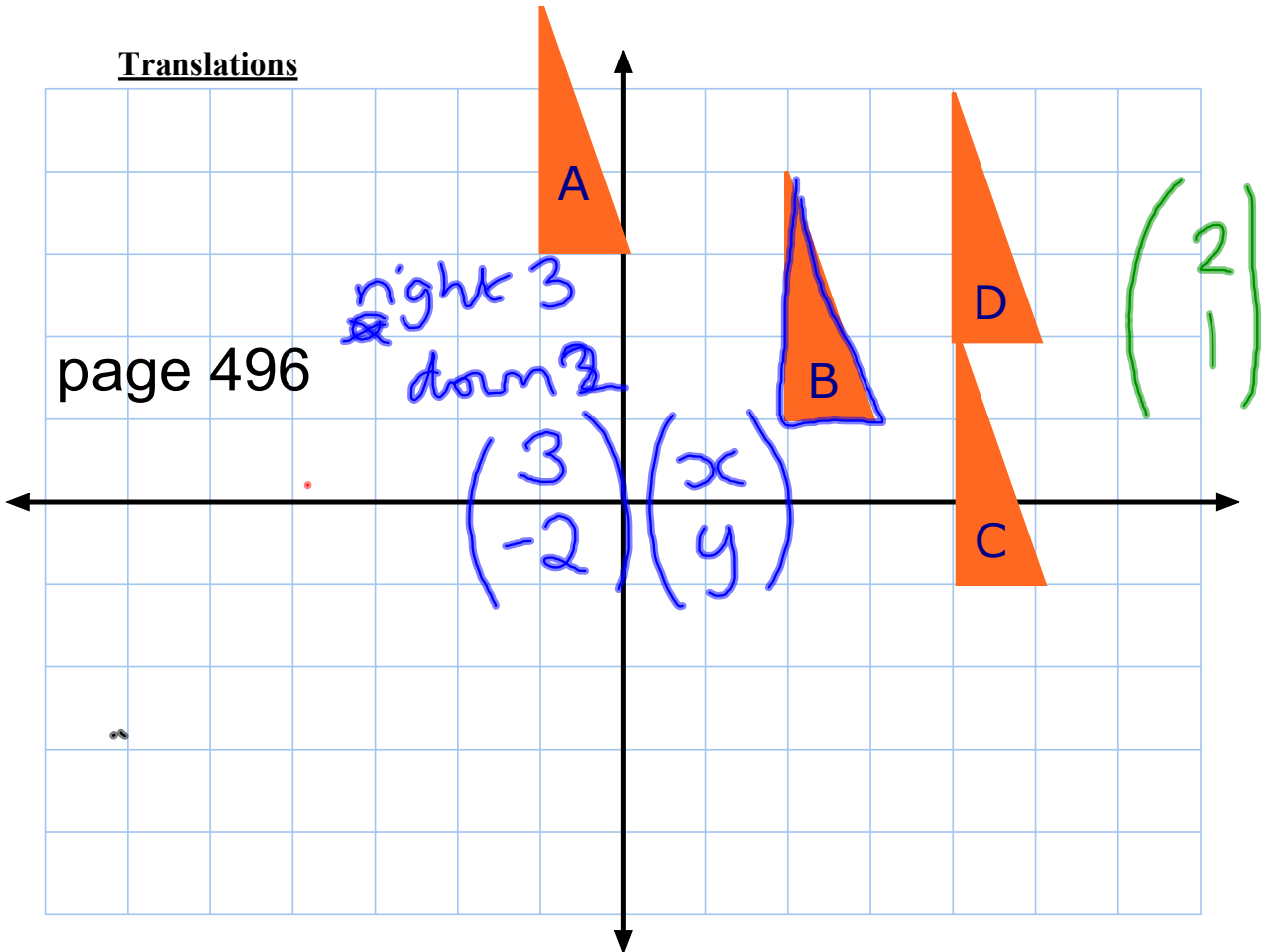




page 499 question 1

If you enlarge a rectangle  
scale factor 2,  
what happens to the area?

Translations



Recognising transformations

Enlargement  
scale factor  
centre

page 500

Rotation  
direction  
centre  
size ( $90^\circ$ )

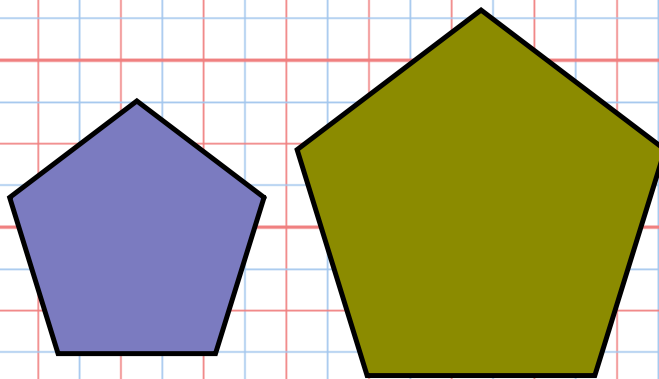
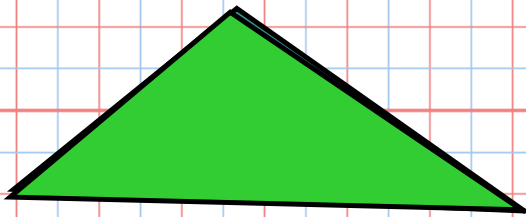
Reflection  
line

Translation  
direction  
 $\begin{pmatrix} x \\ y \end{pmatrix}$

# Congruence

Congruent means identical in size and shape.

It doesn't need to be in the same position.



## Attachments

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rotation.agg