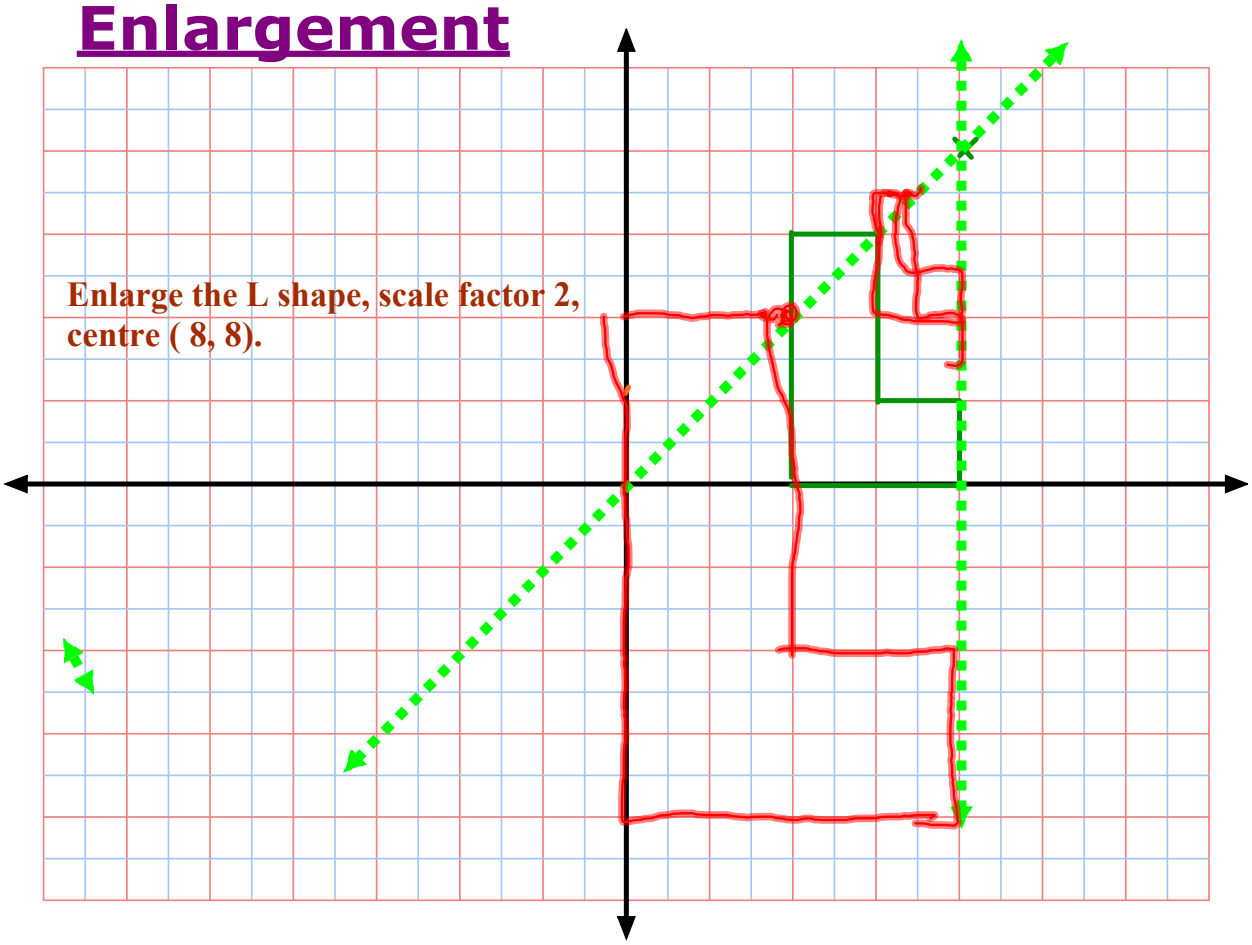
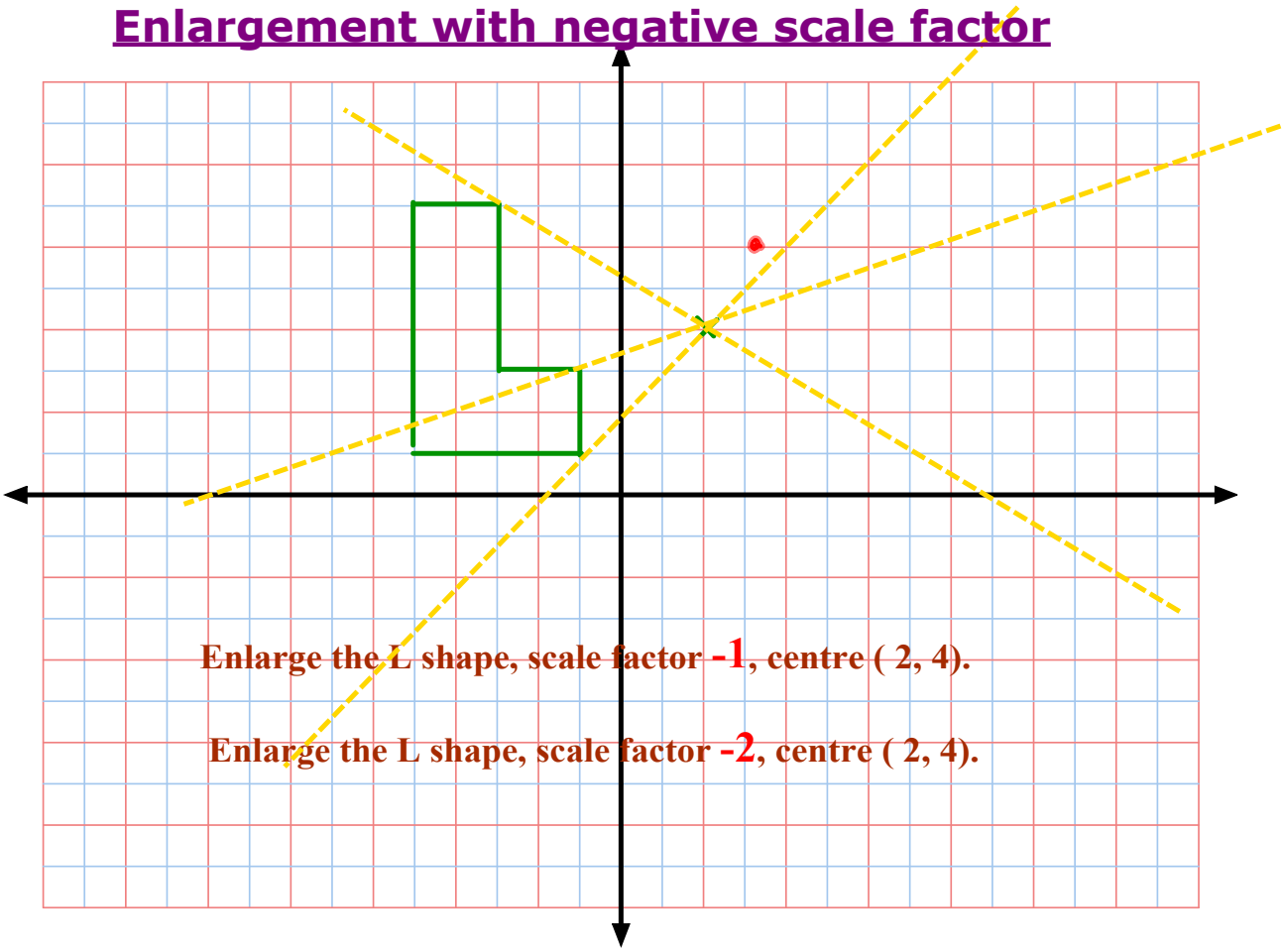
Enlargement



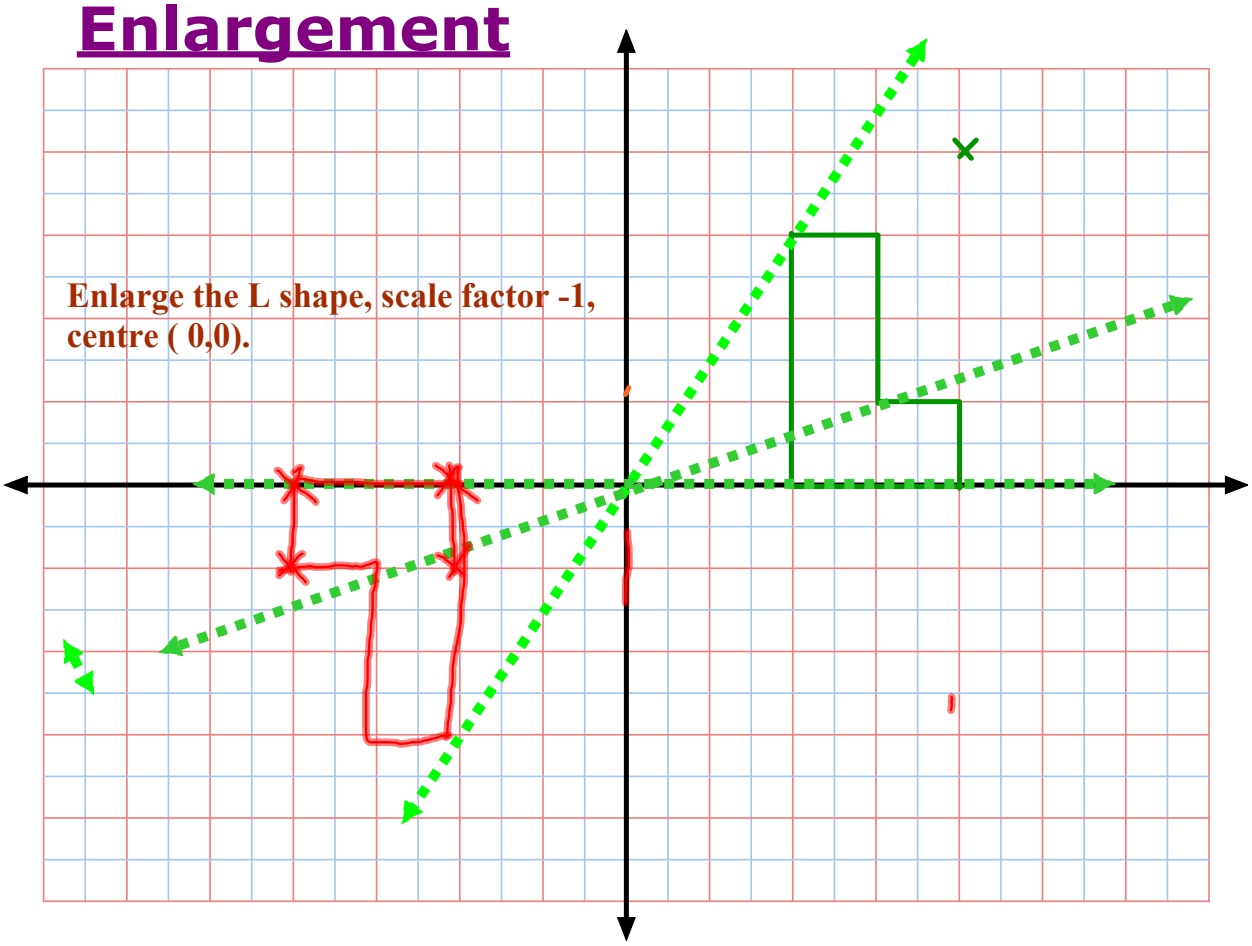
Enlargement with negative scale factor

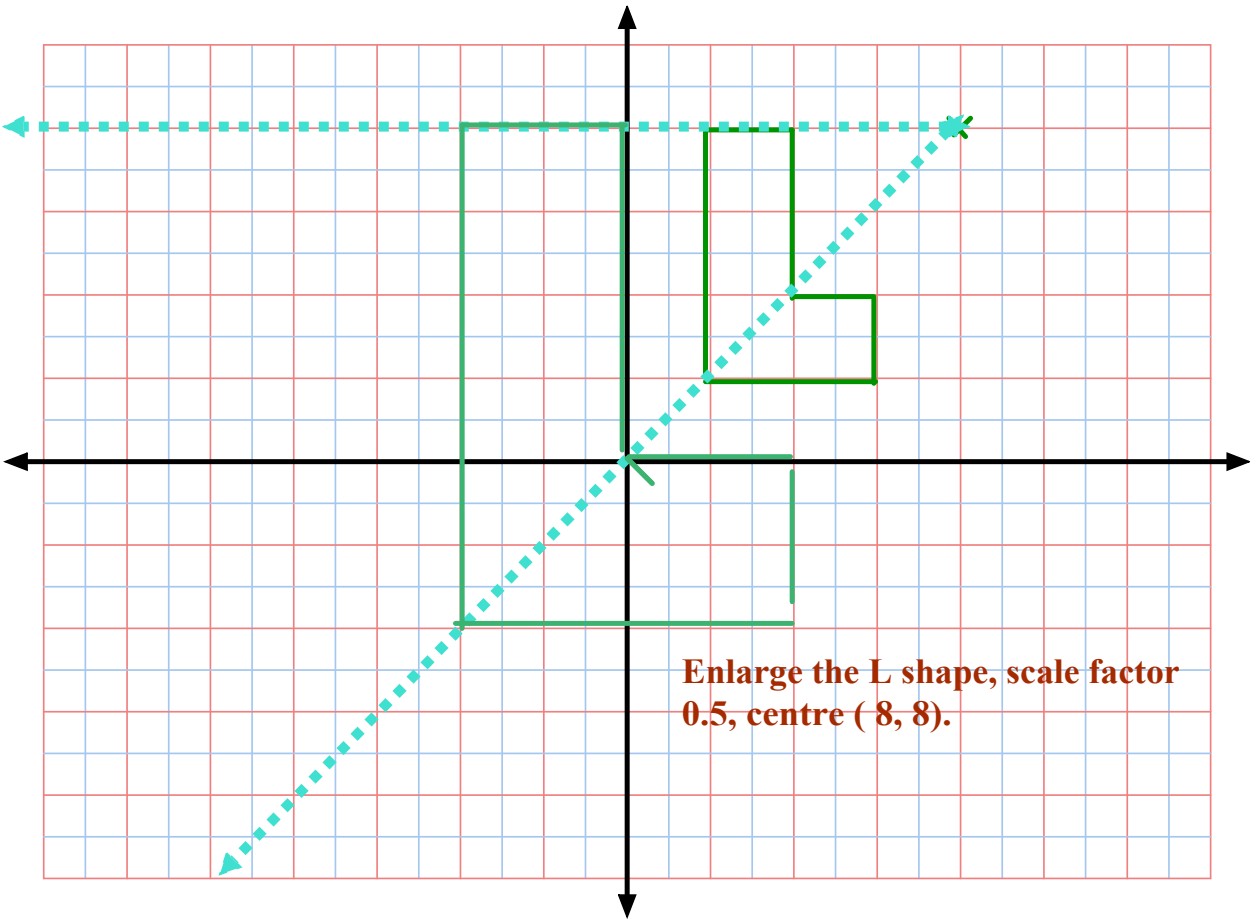


Enlarge the L shape, scale factor -1, centre (2, 4).

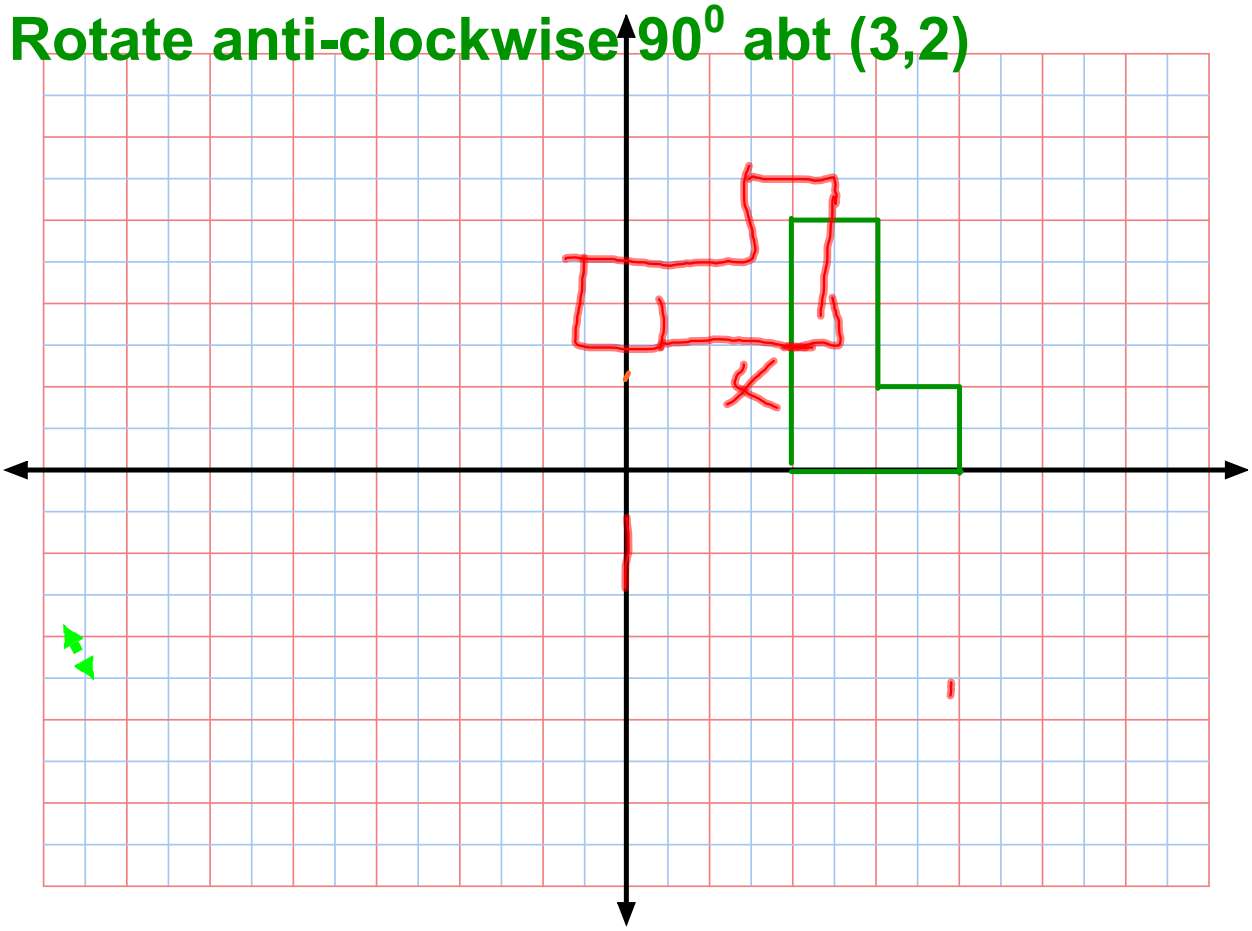
Enlarge the L shape, scale factor -2, centre (2, 4).

Enlargement

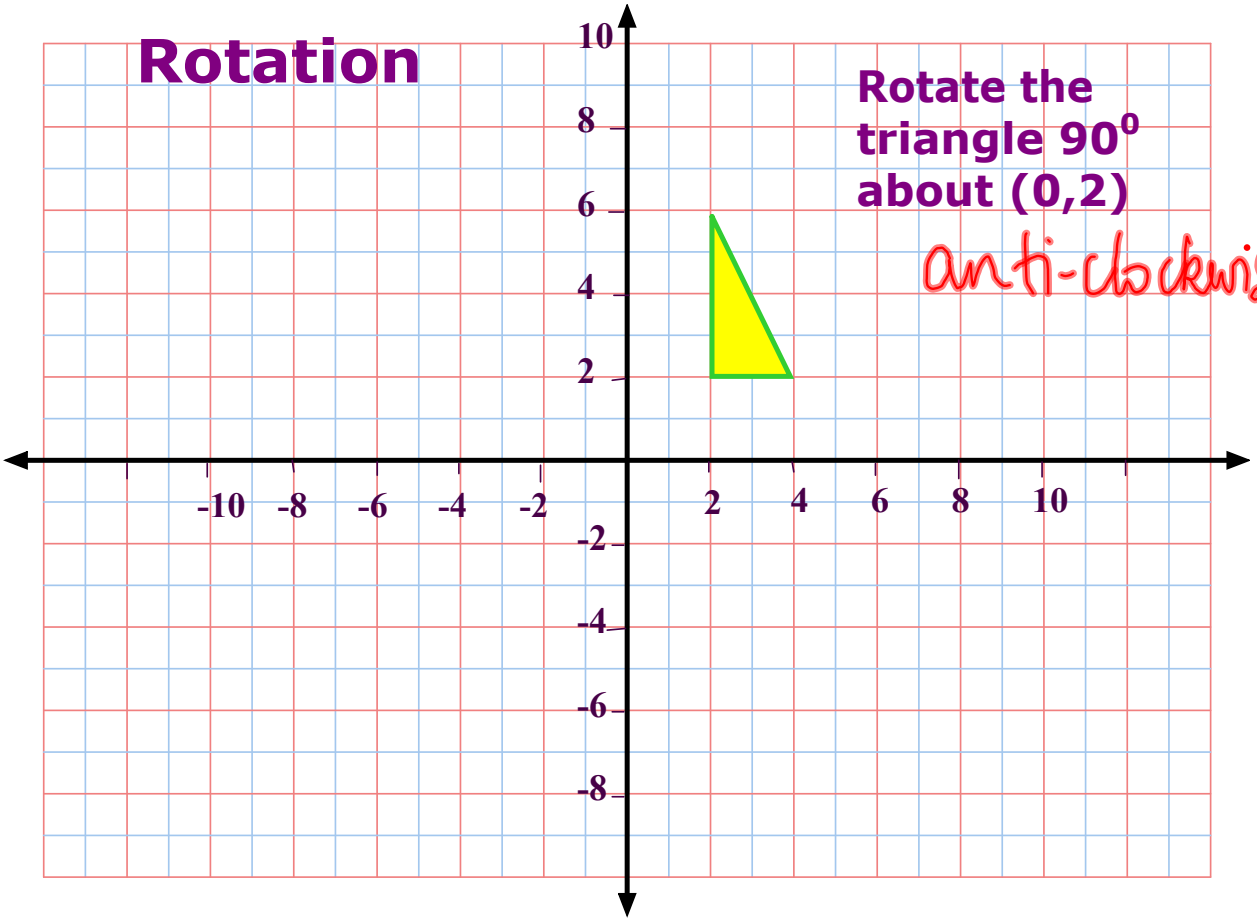



Enlarge the L shape, scale factor
0.5, centre (-8, 8).

Rotate anti-clockwise 90^0 abt (3,2)



Rotation



page 164

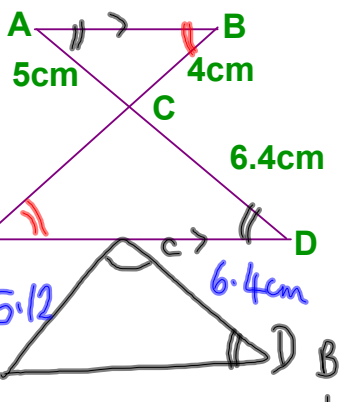
Combined transformations

Page 165

views - plan, front etc

see ppt

Similarity and congruence



Prove triangles ABC and DEC are similar and hence find the length of BE.

=9.12cm

∠ABC

∠A

To prove ABC is similar to DEC

$A\hat{C}B = D\hat{C}E$ (opposite angles are equal)

$E\hat{D}C = B\hat{A}C$ (alternate angles)

$A\hat{B}C = D\hat{E}C$ (alternate)

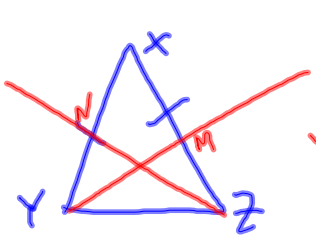
∴ ABC is similar to DEC (AAA)

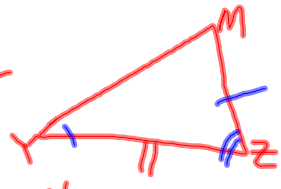
Rules for congruency:

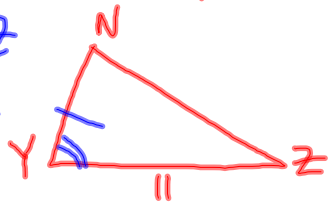
SSS ASA

RHS SAS

Triangle XYZ is isosceles with XY = XZ.
The bisector of angle Y meets XZ at M;
the bisector of angle Z meets XY at N.
Prove that YM = ZN.







To prove: NYZ ≡ MYZ

YZ is common (base)

$M\hat{Z}Y = N\hat{Y}Z$ (angles in an isosceles Δ are equal)

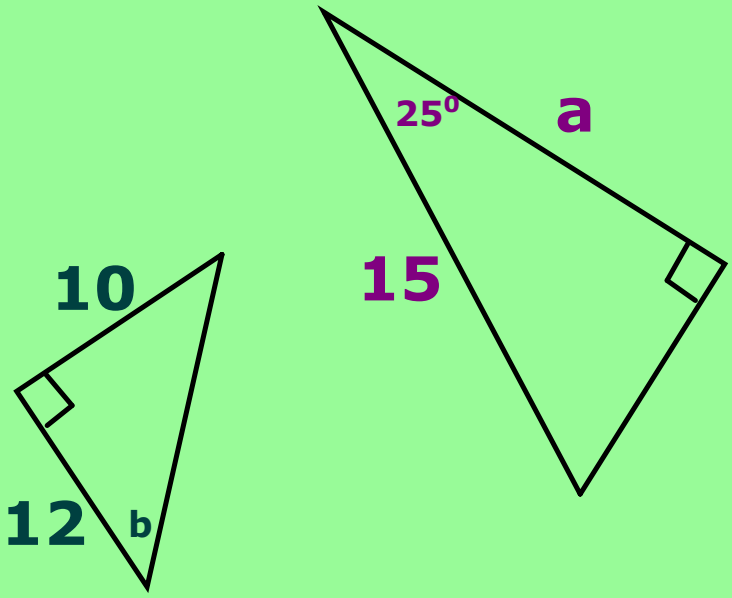
YN = ZM (isosceles Δ)

∴ NYZ ≡ MYZ (SAS)

p335 T2, T3

Trigonometry

1. In 2 D

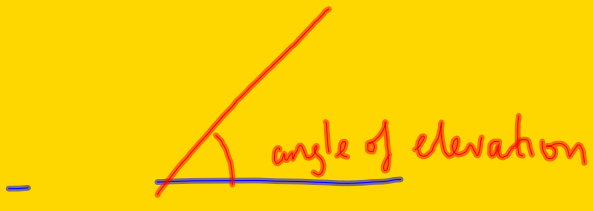


2. In 3D

Big hint:
Try to find all relevant right angled triangles.
Draw them out.

T1 Page 482, T2 as well if you're quick.

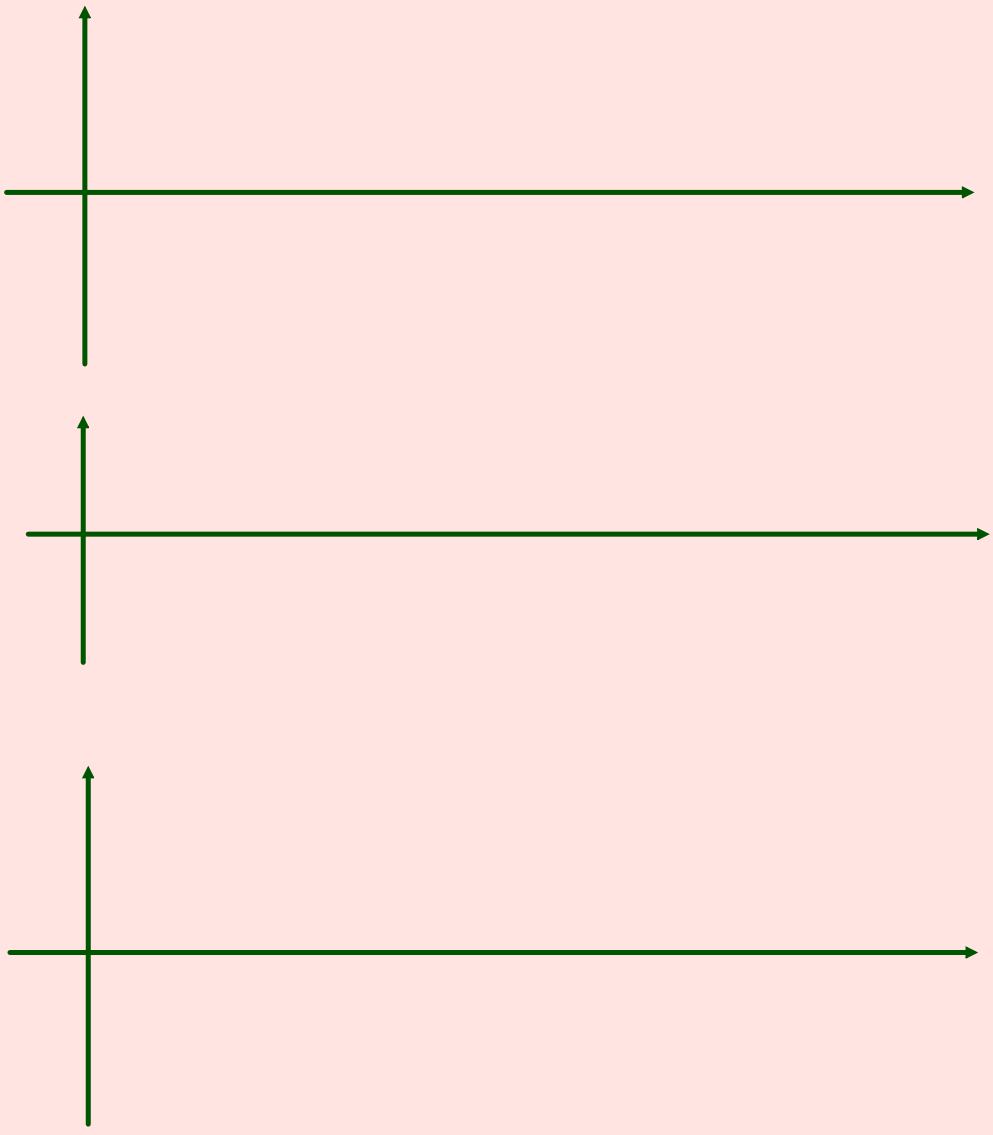
(Look back at 475 for some help)



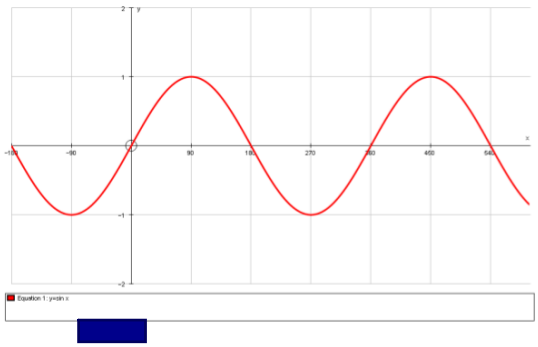
3. Trig in non-right angled triangles

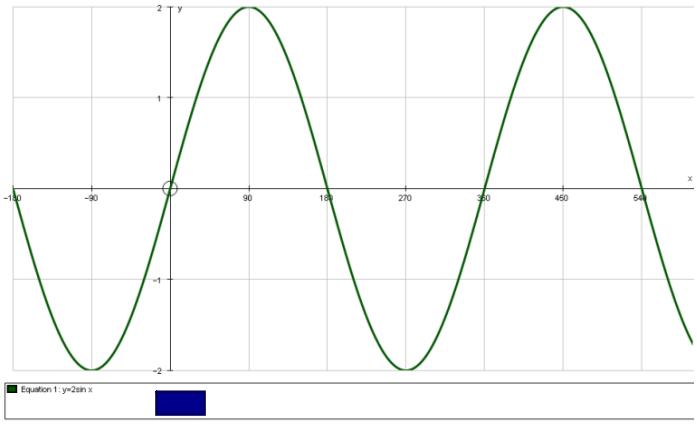
page 474 T1,2

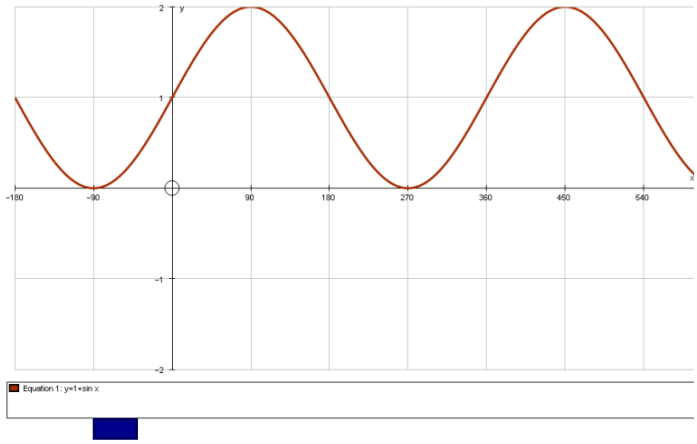
4. Trig graphs

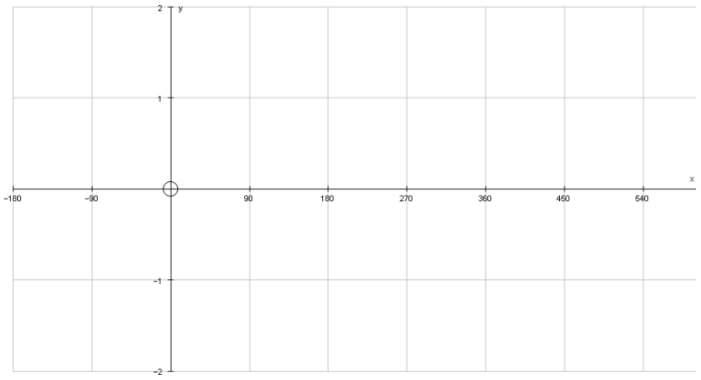


Transformations of trig graphs

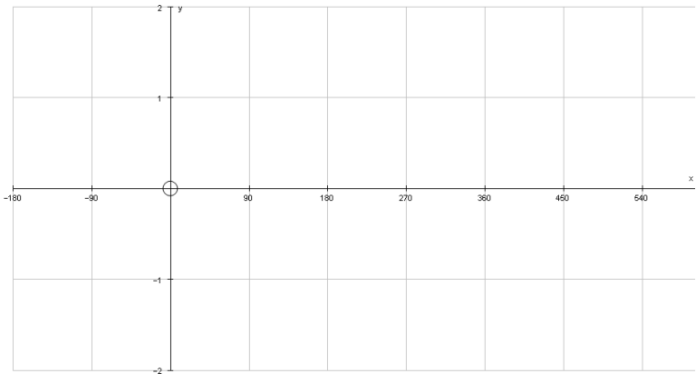


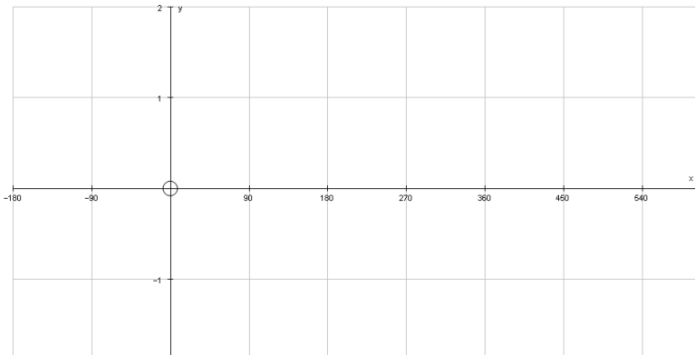


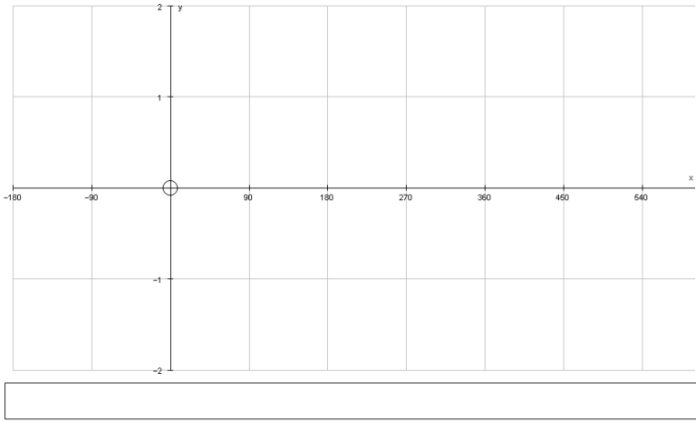



y
x
2
1
−1
−2
−180
−90
90
180
270
360
450
540

page 419


y
x
2
1
−1
−2
−180
−90
90
180
270
360
450
540


y
x
2
1
−1
−180
−90
90
180
270
360
450
540


y
x
2
1
−1
−2
−180
−90
90
180
270
360
450
540