Angles Revision

1) Find each missing angle giving a reason for each

(a)

x $75°$

(b)

$80°$ $40°$ t

(c)

$60°$ m

(d)

20 r

(e)

$150°$ y

(f)

$45°$ t

(g)

$115°$ g

(h)

m $140°$

(i)

100 $45°$ t

(j)

x

(k)

$35°$ x $60°$
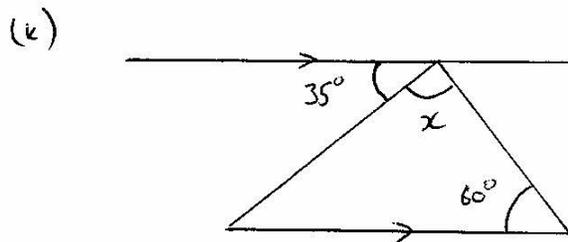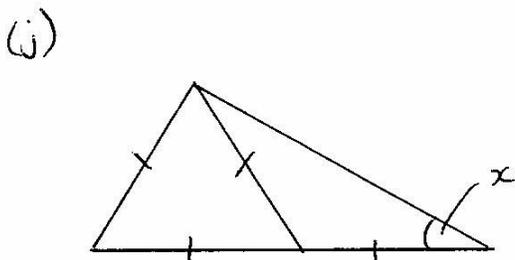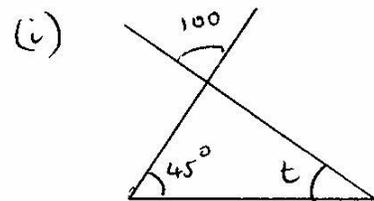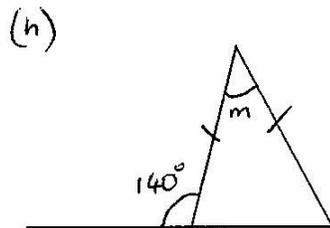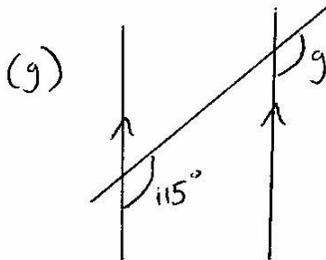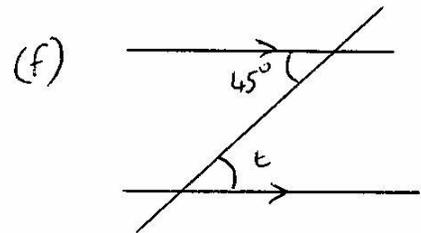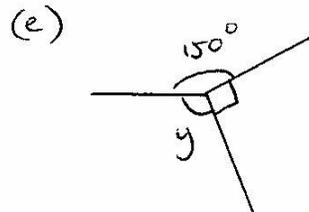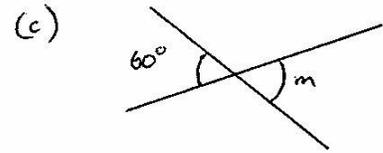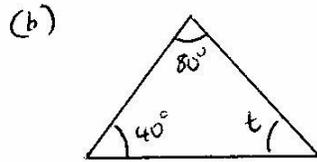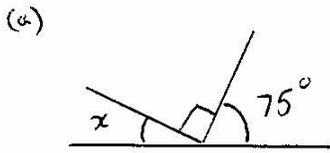
2) Find the sum of the interior angles in a 10 sided shape

3) Find the sum of the exterior angles in an 8 sided shape

4) Find the size of one exterior angle in a regular 12 sided shape

5) Find the size of one interior angle in a regular 8 sided shape

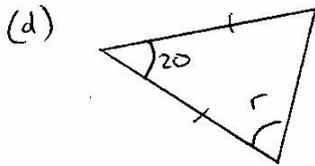6) A regular shape has an exterior angle of 10°, how many sides does it have?

7) A regular shape has an interior angle of 165°, how many sides does it have?

8)   Chris says "the interior angle in this regular shape is 167°".
      Explain why he must be wrong.

9)   Name the quadrilateral

a)   All four sides are the same length, 2 lines of symmetry
b)   Adjacent sides are equal in length, it has no rotational symmetry
c)   Diagonals cross at right angles, it has 4 right angles inside it.

10)   Find the a) number of lines of symmetry and b) the order of rotational symmetry for:

a)   b)
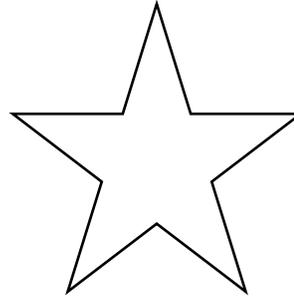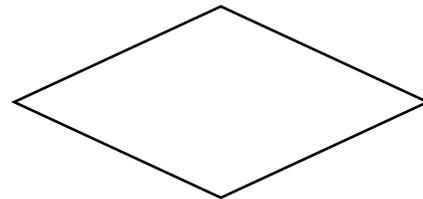

c)   d)

11) The bearing from A to B is 060°. Without drawing a diagram find the bearing from B to A.

13)   A ship sails 6km on a bearing of 080° and then 10km on a bearing of 200°, find its
position from the start point and the bearing it needs to travel on to get home.

Ans

1a) 15(straight line) b) 60(180 in triangle) c) 60(opposite) d) 80(isosceles) e) 120(360 around
point) f) 45(alternate) g) 115(corresponding) h) 100(straight line, isosceles) i) 35(opposite,
180 in triangle j) 30(equilateral, straight line, isosceles) k) 85(alternate, triangle/straightline)
2) 1440 3) 360 4) 30 5) 135 6) 36 7) 24 8) 13 doesn't go into 360 9a) rhombus b) kite c)
square 10a) 2 lines, order 2 b) 5 lines, order 5 c) 0 lines, order 2 d) 2 lines, order 2. 11) 240°
12) 8.7km, 343°