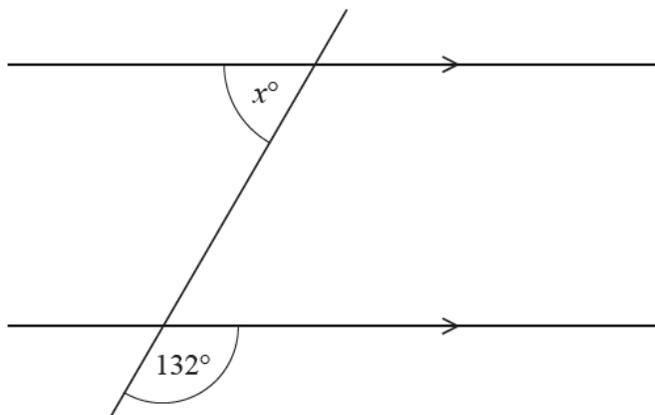


1. Nov/2021/Paper_23/No.2

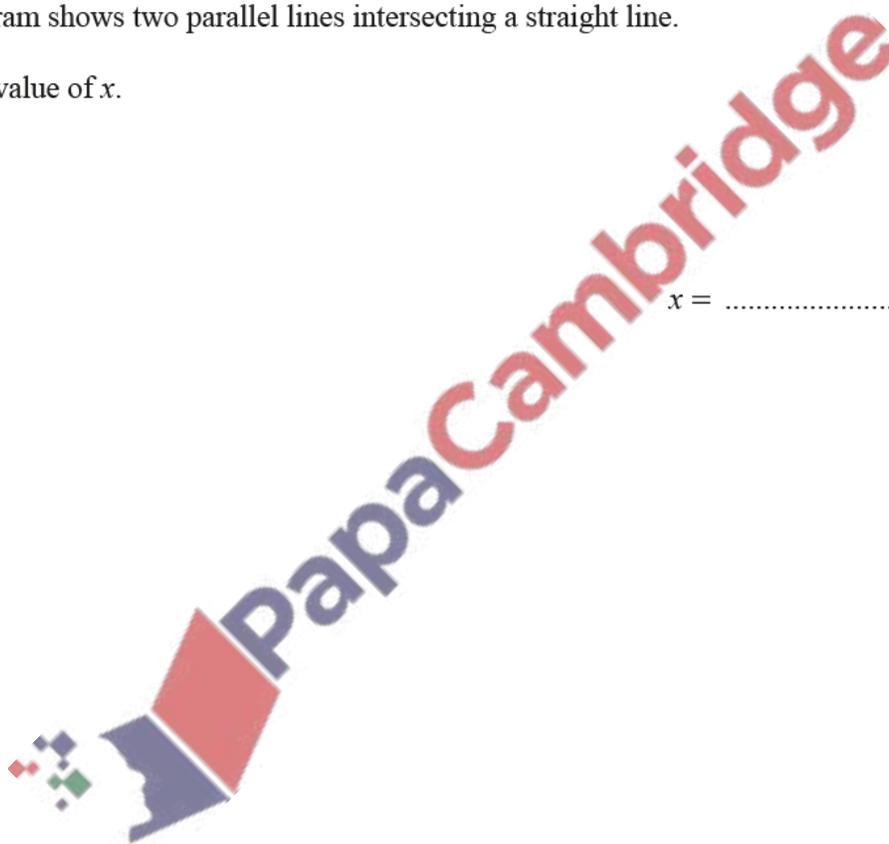


NOT TO
SCALE

The diagram shows two parallel lines intersecting a straight line.

Find the value of x .

$x = \dots\dots\dots$ [2]

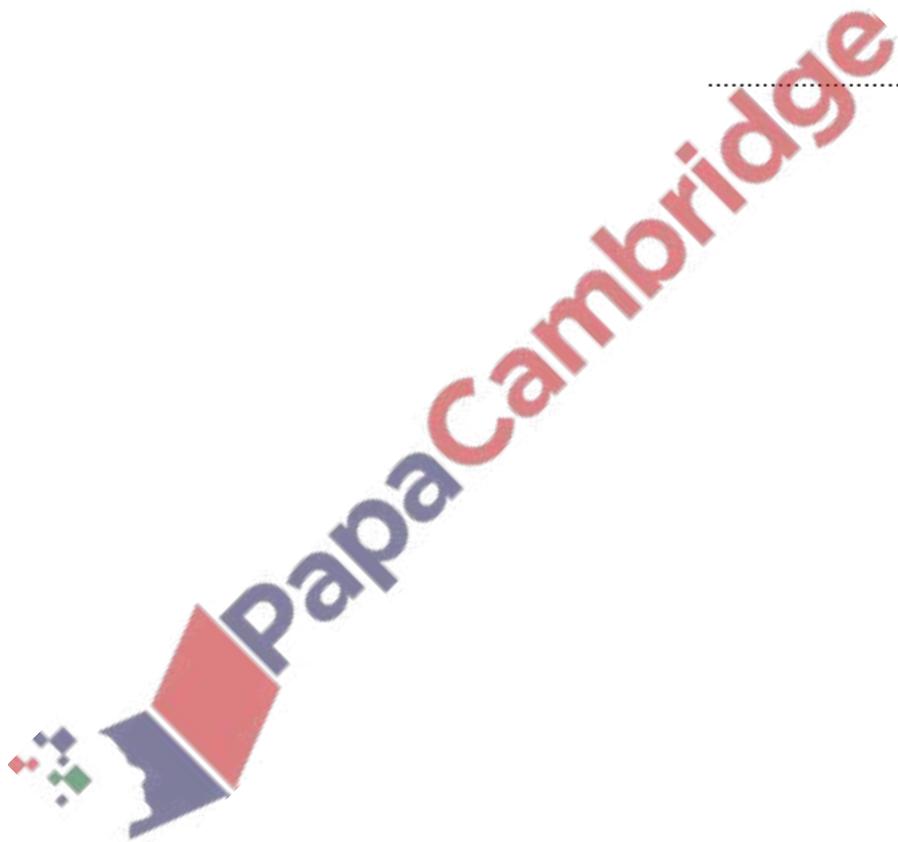


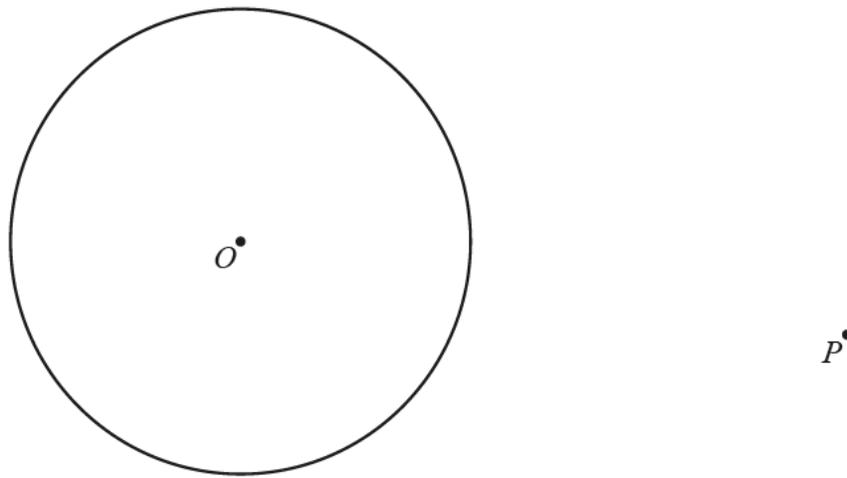
2. Nov/2021/Paper_23/No.17

Each interior angle of a regular polygon is 177° .

Calculate the number of sides of this polygon.

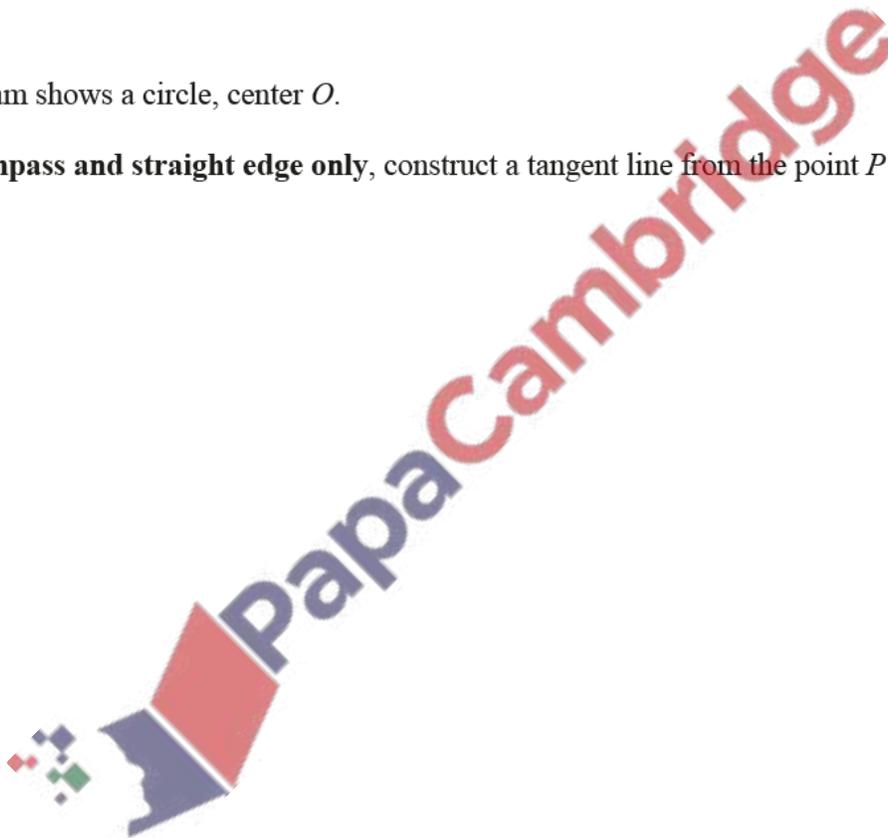
..... [2]



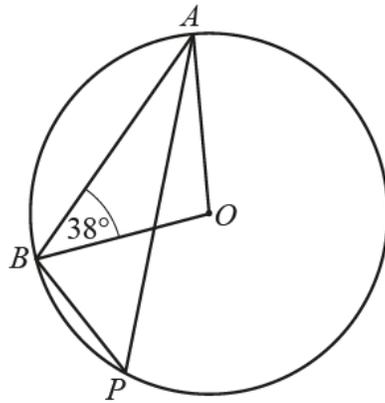


The diagram shows a circle, center O .

Using compass and straight edge only, construct a tangent line from the point P to the circle. [3]



(a)



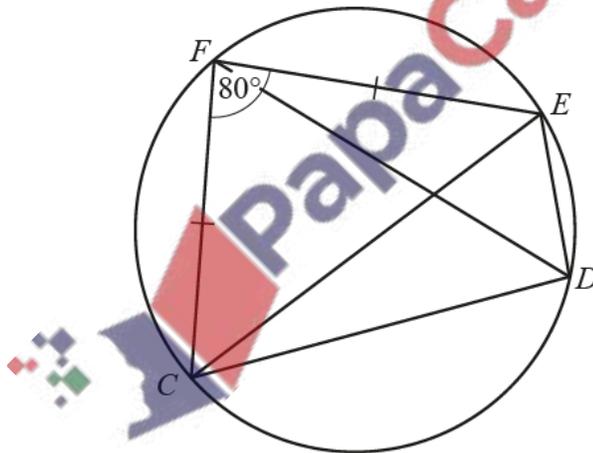
NOT TO SCALE

$A, B,$ and P are points on a circle, center O and angle $OBA = 38^\circ$.

Find angle APB .

Angle $APB = \dots\dots\dots$ [3]

(b)



NOT TO SCALE

$CDEF$ is a cyclic quadrilateral and $FC = FE$.
Angle $CFE = 80^\circ$.

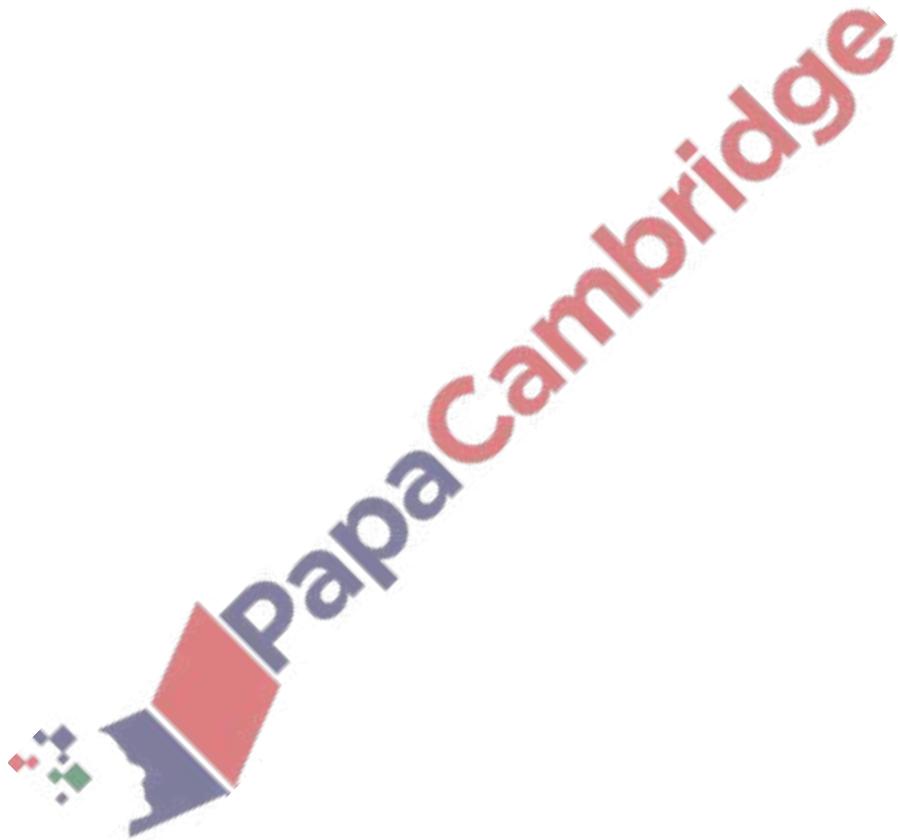
Find

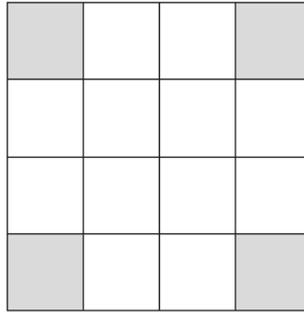
(i) angle CDE ,

Angle $CDE = \dots\dots\dots$ [1]

(ii) angle CDF .

Angle $CDF = \dots\dots\dots$ [2]



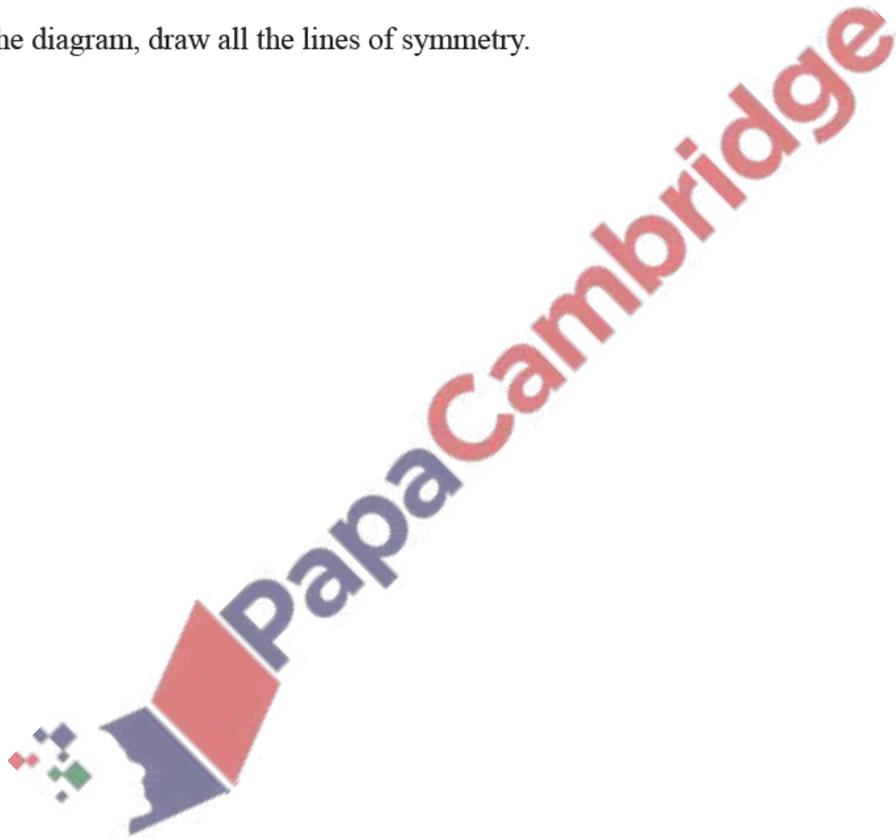


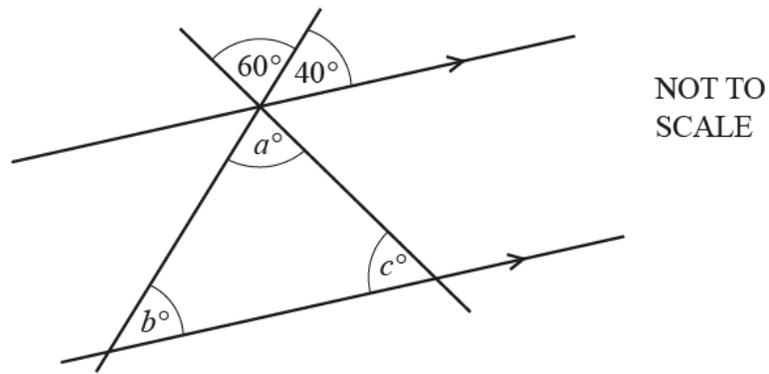
(a) Write down the order of rotational symmetry of this diagram.

..... [1]

(b) On the diagram, draw all the lines of symmetry.

[2]





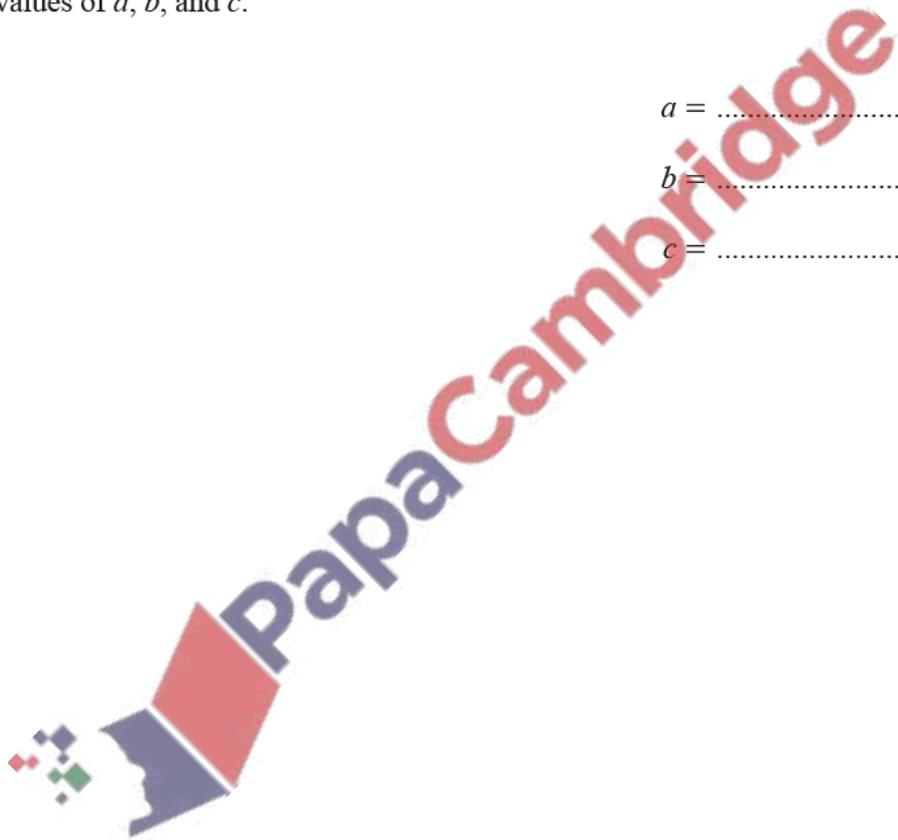
The diagram shows two parallel lines intersected by two straight lines.

Find the values of a , b , and c .

$a =$

$b =$

$c =$ [3]

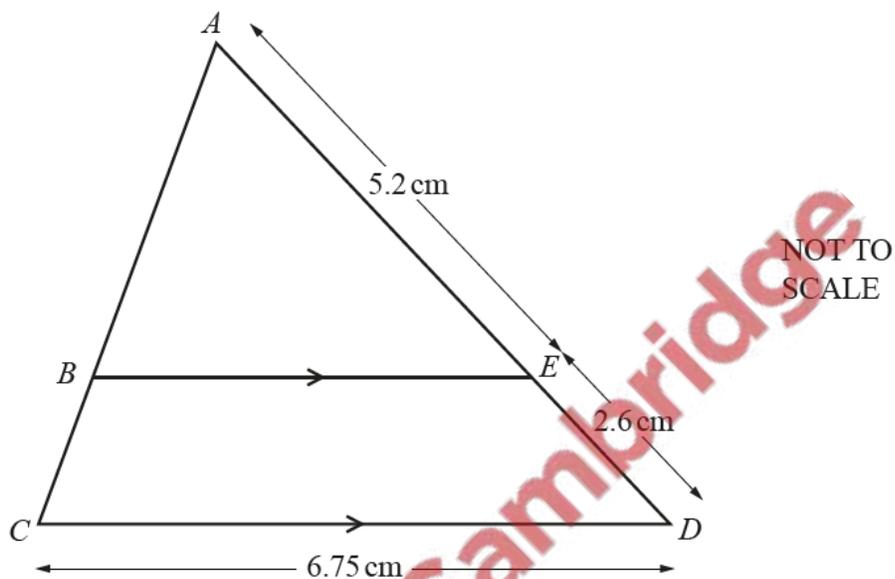


7. June/2021/Paper_41/No.10

(a) Find the size of an exterior angle of a regular polygon with 18 sides.

..... [2]

(b)



In triangle ACD , B lies on AC and E lies on AD such that BE is parallel to CD .
 $AE = 5.2\text{ cm}$ and $ED = 2.6\text{ cm}$.

Calculate BE .

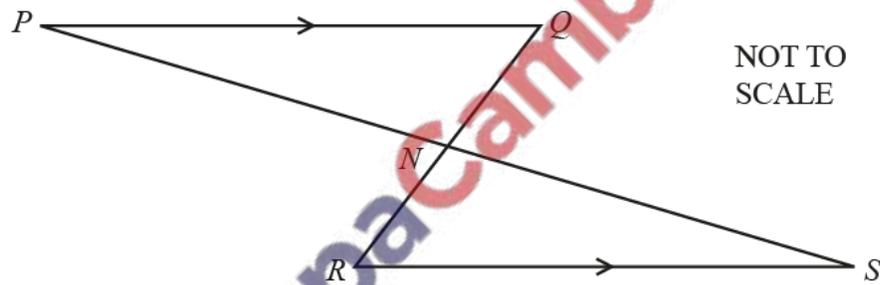
$BE =$ cm [2]

- (c) Two solids are mathematically similar.
 The smaller solid has height 2 cm and volume 32 cm^3 .
 The larger solid has volume 780 cm^3 .

Calculate the height of the larger solid.

..... cm [3]

(d)



PQ is parallel to RS , PNS is a straight line and N is the midpoint of RQ .

Explain, giving reasons, why triangle PQN is congruent to triangle SRN .

.....

.....

.....

.....

[4]