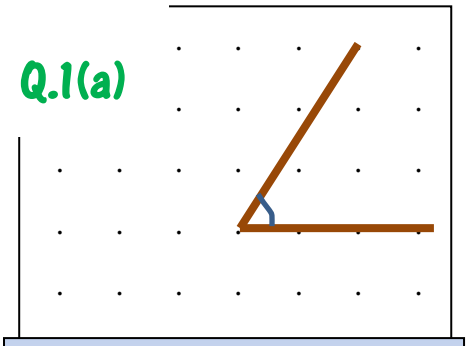
Lwr. 2nd'ry Maths Made Easy

ANGLES : Introductory Terms

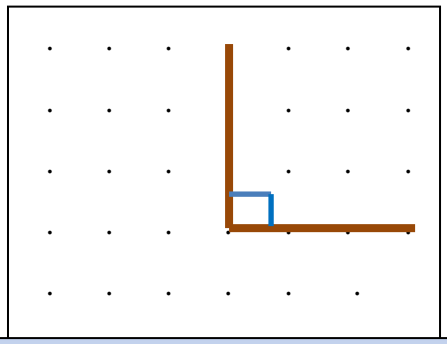
Name : ..... No : .....

Class : .... Date : .....

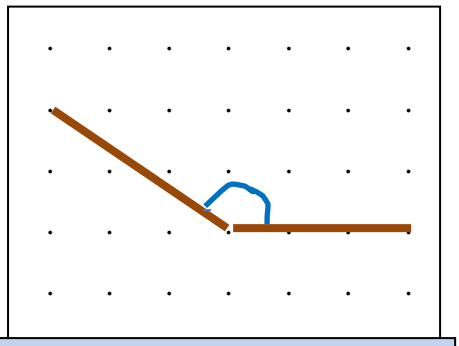
Q.1(a)



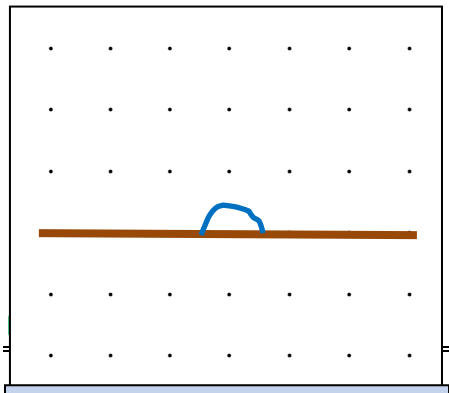
...^{0} < Acute angle < ...^{0}



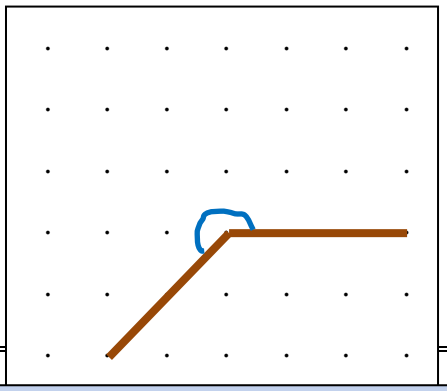
Right angle = ...^{0}(degrees)



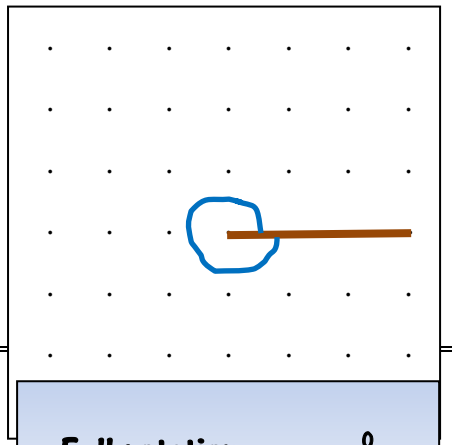
...^{0} < Obtuse angle < ..... ^{0}



Straight angle = ...^{0}



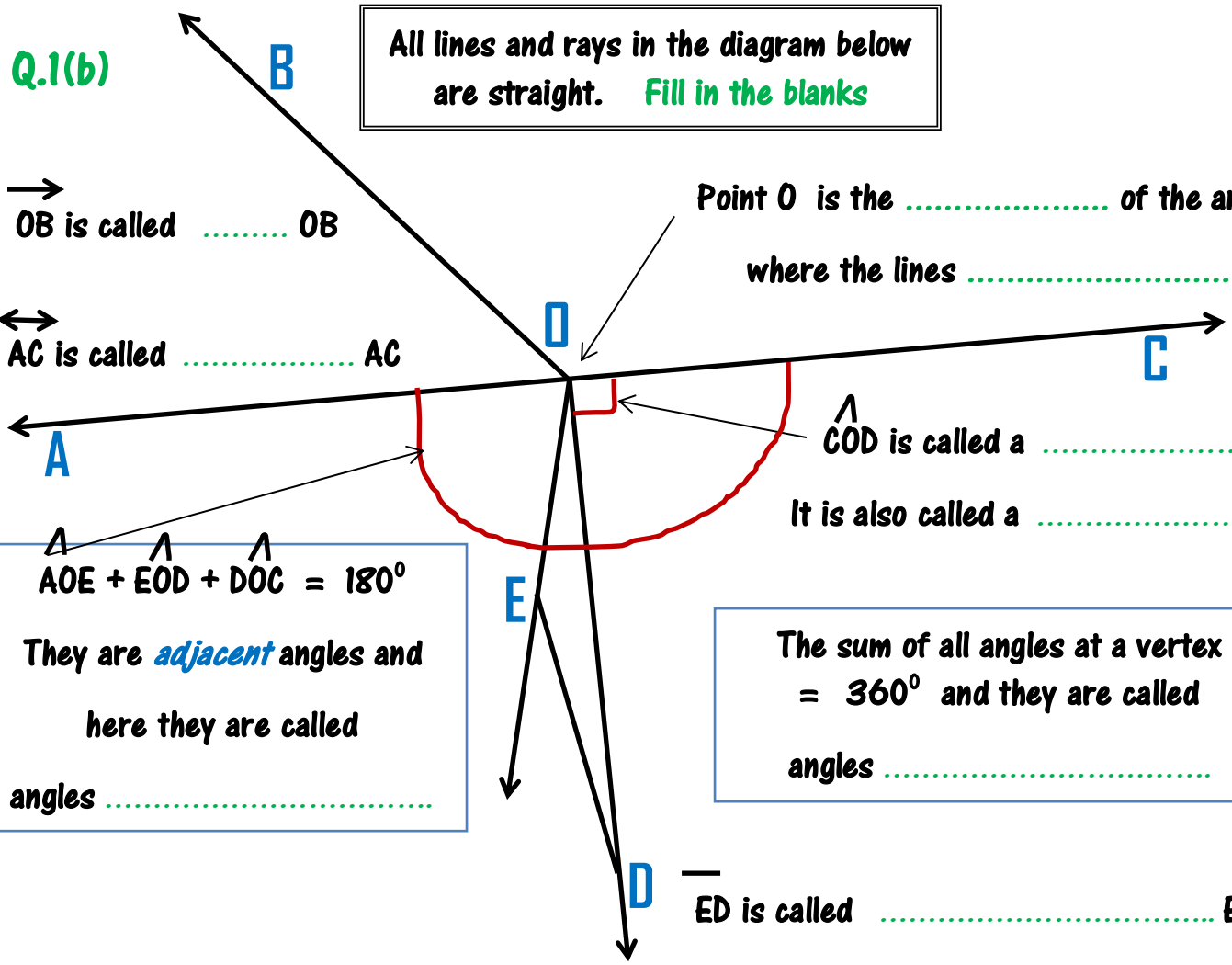
.....^{0} < Reflex angle < .....^{0}



Full rotation = ...^{0}

Q.1(b)

All lines and rays in the diagram below are straight. Fill in the blanks



$\overrightarrow{OB}$ is called ..... OB

Point O is the ..... of the angle where the lines .....

$\overleftrightarrow{AC}$ is called ..... AC

$\angle COD$ is called a ..... angle

It is also called a .....

$\angle AOE + \angle EOD + \angle DOC = 180^0$

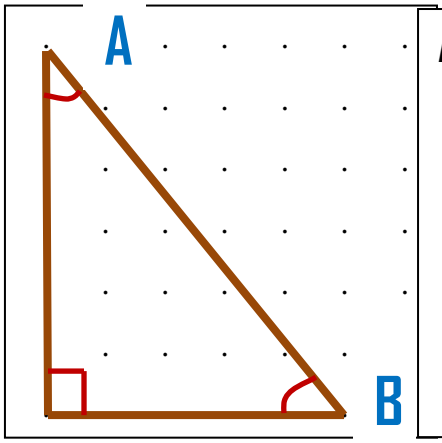
They are *adjacent* angles and here they are called angles .....

The sum of all angles at a vertex = 360^0 and they are called angles .....

$\overline{ED}$ is called ..... ED

Q.2 : Complete the table below

Interior Angle Sum of a Triangle = 180^0



Angle A + B + 90^0 = 180^0

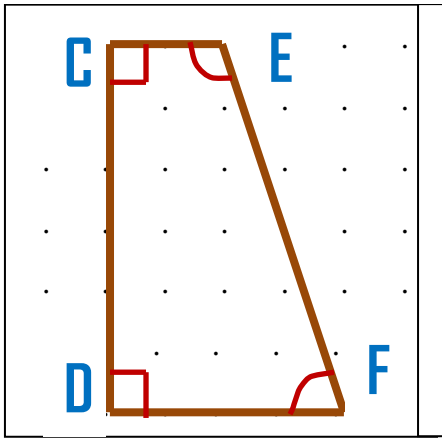
$\Longrightarrow$ A + B = 90^0

($180 - 90)^0$

Two angles which add up to 90^0 are called *complementary* angles

e.g. Angles A and B

Interior Angle Sum of a Quadrilateral = 360^0



E + F + (2 x 90^0) = 360^0

$\Longrightarrow$ E + F = 180^0

($360 - 180)^0$

Two angles which add up to 180^0 are called *supplementary* angles

e.g. Angles E and F

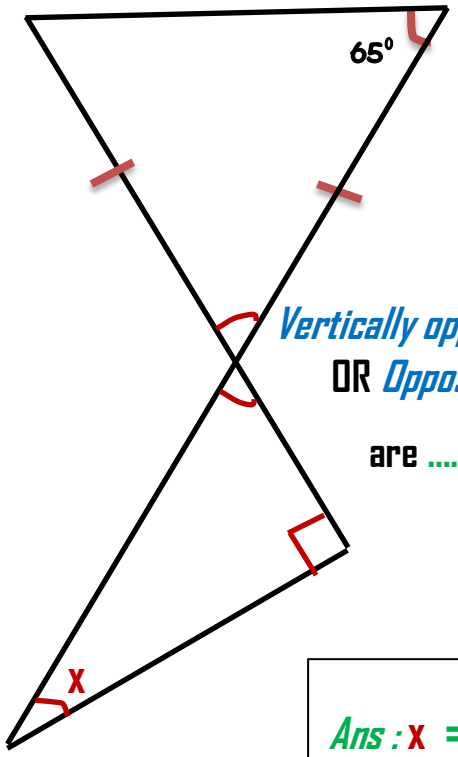
Interior Angle Sum of any Polygon.

Formula : (no. of sides – 2) x 180^0

Polygon	*No. of sides*	*Interior Angle Sum*	*If the polygon is regular*, each angle equals?*
Triangle	3	(3-2) x 180^0 = 180^0	$180^0 \div 3 = 60^0$ (equilateral triangle)
Quadrilateral	4	360^0	90^0 (square)
Pentagon	5	540^0	108^0
Hexagon	6	...	...
Heptagon	7		
Octagon	8		
Nonagon	9		
Decagon	10		
Dodecagon	12		

(* *Regular* means all sides and all angles are the same)

Q.3 : Find x



Isosceles Triangle : the base angles are .....

Vertically opposite angles OR *Opposite* angles are .....

Ans : x = ...

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Q.4 :

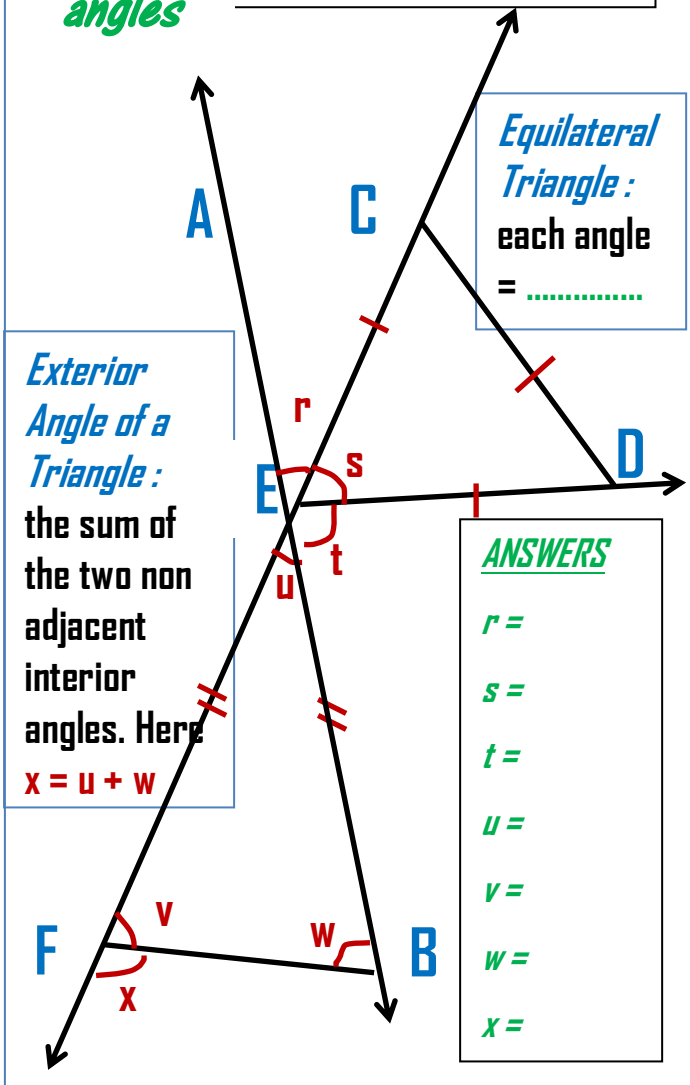
Find the angles

GIVEN

△CDE is equilateral

t = 2r

△EFB is isosceles



Equilateral Triangle : each angle = ...

Exterior Angle of a Triangle : the sum of the two non adjacent interior angles. Here x = u + w

ANSWERS

r =

s =

t =

u =

v =

w =

x =