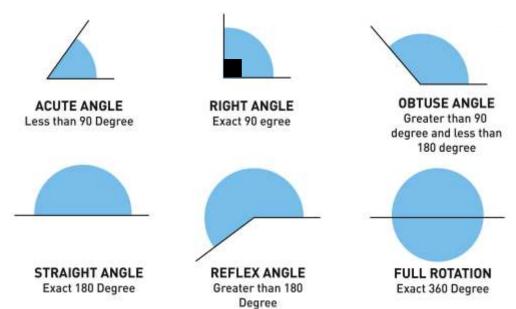
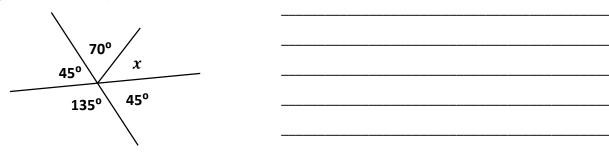
GEOMETRY OF STRAIGHT LINES - TOPIC 10



ONE Point Geometry

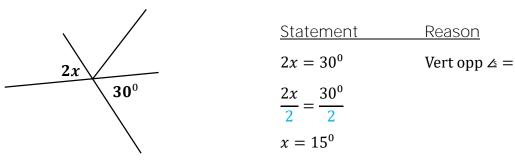
Angles around a point (add to 360°)



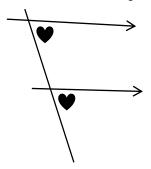
Angles on a straight line (add to 180°)



Vertically opposite angles (equal to each other)

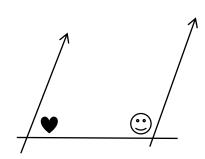


TWO Point Geometry (Parallel Lines)



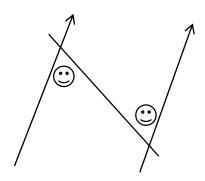
Corresponding

Angles are equal



Co-interior

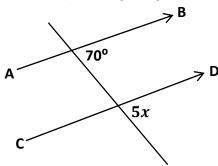
Angles add to 180°



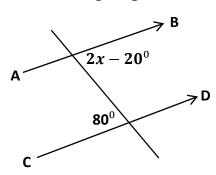
Alternating

Angles are equal

Corresponding Angles



Alternating Angles



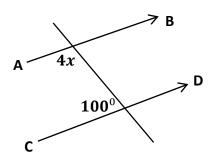
$$2x - 20^{0} = 80^{0}$$

$$2x = 80^{\circ} + 20^{\circ}$$

$$2x = 100^{\circ}$$

$$x = 50^{\circ}$$

Co-interior Angles



Examples of Straight Line Geometry

EXAMPLE	STATEMENT	REASON
1. // N		
1		
$a \nearrow P$		
45° b		
5c		
M		
/		
6		
2.		
x		
140°		
F 15°		
3.		
G A		
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		
F / F		
$\sqrt{3y + 20^{\circ}}$		
$3x + 10^{\circ}$ 40°		
Ë		
4. ABCD is a rhombus		
AB		
x 25°		
90°		
$zz + 10^{\circ}$ y		
,		
	ı	