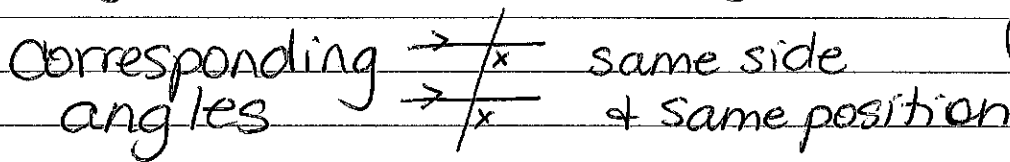
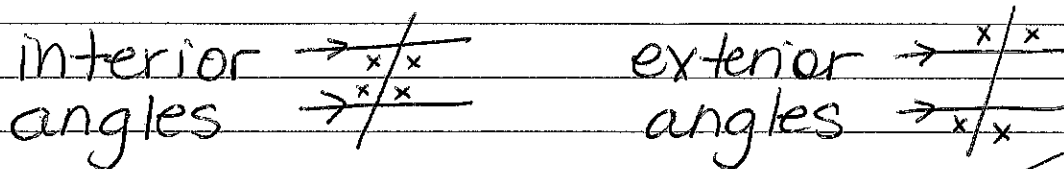


Foundations II

Class notes: Chapter 2

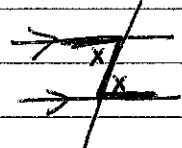
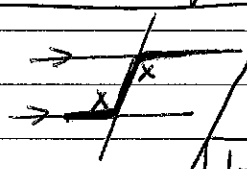
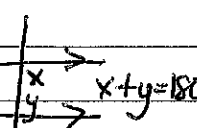
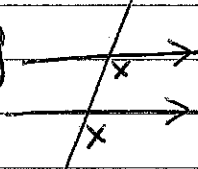
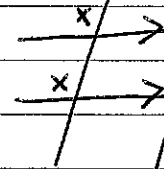
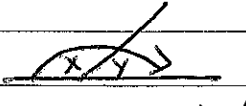


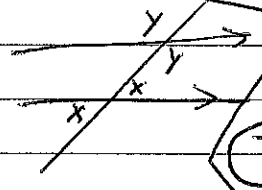
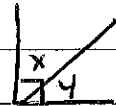
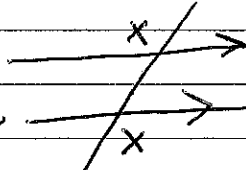
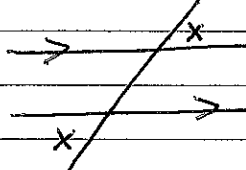
\parallel = parallel
 \perp = perpendicular

- 2.1 Parallel lines \implies * will never intersect
- 2.2
- 2.3 transversal - a line that crosses 2 or more other lines

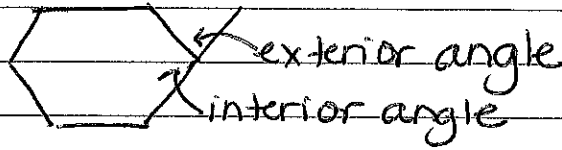


\triangle + all angles = 180°

Patterns in angle measures in parallel lines

<p>1 alternate interior angles are <u>equal</u></p> 	<p>look for a Z</p>		<p>5 interior angles add to = 180°</p> <p>look for a C</p>  <p>$x + y = 180$</p>
<p>2 corresponding angles are <u>equal</u></p> 	<p>Same position & same side of transversal</p>		<p>6 $x + y = 180^\circ$</p> 
<p>3 opposite angles are <u>equal</u></p> 	<p>They touch diagonally</p> 		<p>7 $x + y = 90^\circ$</p> 
<p>4 alternate exterior angles are <u>equal</u></p> 	<p>opposite outside</p>		

2.4 Polygons :



Convex = each interior polygon angle $< 180^\circ$

* Sum of interior angles :

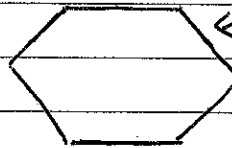
$n = \#$ of sides

$$180^\circ(n-2)$$

To find each angle

$$\text{take } \frac{180(n-2)}{n}$$

Sum exterior angles = 360°



6 sides

Sum interior

$$180(6-2)$$

$$= 180 \times 4$$

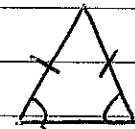
$$= 720^\circ$$

each exterior
 $\frac{360}{6}$
 $= 60^\circ$

$$1 \text{ interior angle} = \frac{720}{6}$$

$$= 120^\circ$$

# sides	name
3	triangle
4	rectangle
5	pentagon
6	hexagon
7	Septagon
8	octagon
9	nonagon
10	decagon
11	hendecagon
12	dodecagon
15	pentadecagon

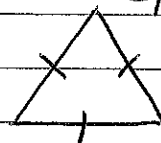


isosceles

- 2 sides

equal

2 angles equal too!



equilateral

all sides & angles equal