



c)  $B\hat{C}D = 180^\circ - A\hat{B}C$  Ko-binne hoeke=  $180^\circ$  ( $AB \parallel CD$ )  
 $B\hat{C}D = 180^\circ - 116.57^\circ$   
 $B\hat{C}D = 63.43^\circ$   
 $B\hat{A}D = 180^\circ - A\hat{D}C$  Ko-binne hoeke=  $180^\circ$  ( $AB \parallel CD$ )  
 $B\hat{A}D = 180^\circ - 116.57^\circ$   
 $B\hat{A}D = 63.43^\circ$   
 $B\hat{A}D + A\hat{B}C = 63.43^\circ + 116.57^\circ = 180^\circ$   
Aangesien  $B\hat{A}D + A\hat{B}C = 180^\circ$  dit beteken dat ko-binne hoeke=  $180^\circ$   
 $\therefore BC \parallel AD$  So vierhoek ABCD is 'n parallelogram.

3. a) Reghoek b) Ruit  
c) Trapesium d) Vierkant  
e) Parallelogram

4. a)  $\hat{C}2 = 66^\circ$  Verwisselende hoeke is =  
b)  $\hat{C}1 = 180^\circ - 66^\circ = 114^\circ$  Hoeke op 'n reguit lyn =  $180^\circ$   
c)  $\hat{C}1 = \hat{A}1 = 114^\circ$  Ooreenkomstige hoeke is =  
 $\hat{A}1 = \hat{A}4 = 114^\circ$  Regoorstaande hoeke is =
5. a)  $\hat{H}3 = \hat{D}2 = 61^\circ$  Ooreenkomstige hoeke is =  
b)  $\hat{D}3 = 180^\circ - \hat{D}2$  Hoeke op 'n reguit lyn =  $180^\circ$   
 $\hat{D}3 = 180^\circ - 61^\circ = 119^\circ$   
c)  $\hat{D}4 = \hat{D}2 = 61^\circ$  Regoorstaande hoeke is =  
d)  $\hat{E}3 = 180^\circ - \hat{E}2$  Hoeke op 'n reguit lyn =  $180^\circ$   
 $\hat{E}3 = 180^\circ - 106^\circ = 74^\circ$   
e)  $\hat{E}3 = \hat{H}1 = 74^\circ$  Verwisselende hoeke is =  
 $180^\circ = \hat{H}1 + \hat{H}2 + \hat{H}3$  Hoeke op 'n reguit lyn =  $180^\circ$   
 $180^\circ = 74^\circ + \hat{H}2 + 61^\circ$   
 $\hat{H}2 = 45^\circ$

- f)  $\hat{D}1 = 180^\circ - 61^\circ$       Hoeke op 'n reguit lyn =  $180^\circ$   
 $\hat{D}1 = 119^\circ$   
 $\hat{M}1 = \hat{D}1 = 119^\circ$       Ooreenkomstige hoeke is =
- g)  $\hat{M}2 = \hat{D}2 = 61^\circ$       Ooreenkomstige hoeke is =
- h)  $\hat{H}6 = 180^\circ - \hat{M}1$       Ko-binne hoeke =  $180^\circ$   
 $\hat{H}6 = 180^\circ - 119^\circ = 61^\circ$
- i)  $\hat{H}5 = \hat{H}2 = 45^\circ$       Regoorstaande hoeke is =
- j)  $\hat{H}4 = 180^\circ - \hat{H}2 - \hat{H}3$       Hoeke op 'n reguit lyn =  $180^\circ$   
 $\hat{H}4 = 180^\circ - 45^\circ - 61^\circ$   
 $\hat{H}4 = 74^\circ$   
 $\hat{G}4 = \hat{K}2 = 90^\circ$       Verwisselende hoeke is =  
 $\hat{K}1 = 180^\circ - 90^\circ - 74^\circ$       Binnehoeke van 'n  $\Delta = 180^\circ$   
 $\hat{K}1 = 180^\circ - (164^\circ)$   
 $\hat{K}1 = 16^\circ$
6. a)  $\hat{A}DE = \hat{P}AD = 53^\circ$       Verwisselende hoeke is =
- b)  $\hat{A}BE = 180^\circ - \hat{A}BE$       Ko-binne hoeke =  $180^\circ$   
 $\hat{A}BE = 180^\circ - 104^\circ$   
 $\hat{A}BE = 76^\circ$
- c)  $\hat{C}BX = \hat{A}BE = 76^\circ$       Regoorstaande hoeke is =
- d)  $\hat{E}FY = 180^\circ - \hat{E}FC$       Hoeke op 'n reguit lyn =  $180^\circ$   
 $\hat{E}FY = 180^\circ - 149^\circ$   
 $\hat{E}FY = 31^\circ$
- e)  $\hat{B}CF = 31^\circ = \hat{E}FY$       Ooreenkomstige hoeke is =
- f)  $\hat{C}BE = 180^\circ - \hat{A}BE$       Hoeke op 'n reguit lyn =  $180^\circ$   
 $\hat{C}BE = 180^\circ - 76^\circ$   
 $\hat{C}BE = 104^\circ$



d)  $180^\circ - 45^\circ = d$   
 $d = 135^\circ$

Hoeke op 'n reguit lyn =  $180^\circ$

9. a)

$$y = z + 2$$

$$y = 3 + 2 = 5$$

$$x = 2y$$

$$x = 2(5) = 10$$

$$p = \frac{2yz}{3}$$

$$p = \frac{2(5)(3)}{3} = 10$$

$$x = p = 10$$

$$\hat{A}\hat{B}\hat{C} = 180^\circ - 92^\circ = 88^\circ$$

$$\hat{D}\hat{B}\hat{E} = 180^\circ - 92^\circ = 88^\circ$$

$$\hat{C} = \hat{E}$$

$$\hat{A} = \hat{D}$$

$$\therefore \triangle ABC \equiv \triangle BDE \text{ (HHS)}$$

HHS = hoek, hoek, sy

$\angle$ 's op reguit lyn =  $180^\circ$

$\angle$ 's op reguit lyn =  $180^\circ$

Verw.  $\angle$ 'e =

Verw.  $\angle$ 'e =