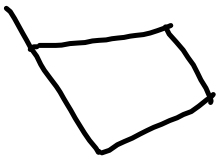
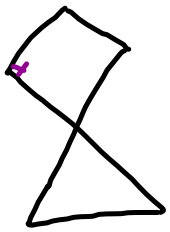
P72

#1 a) 

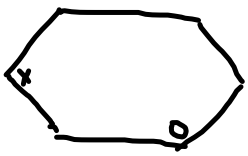
Not

b) 

Not

c) 

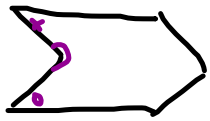
Not

#2 a) 

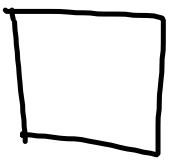
Convex

b) 

Concave

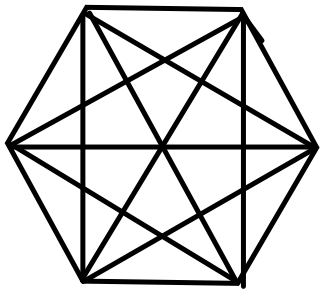
c) 

Concave

#3 a) 

b) 

#4 a)



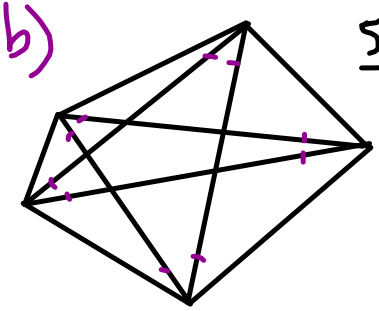
$n = 6$

$n-3$

$6-3=3$

$\frac{6(6-3)}{2} = 9$

b)



$\frac{5(5-3)}{2} = 5$

#5 a) 7 sides: $\frac{n(n-3)}{2} = \frac{7(7-3)}{2} = \frac{7(4)}{2} = \frac{28}{2} = 14$

b) 12 sides: $\frac{12(12-3)}{2} = \frac{12(9)}{2} = 6(9) = 54$

c) 10 sides: $\frac{10(10-3)}{2} = 35$

#6 a) 20 diagonals: $2\left(\frac{n(n-3)}{2}\right) = (20)2$ Octagon

$n(n-3) = 40$

$8(8-3)$

$8(5)$

8 5

b) 9 diagonals:

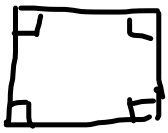
Hexagon

c) 35 diagonals: Decagon

#7 a) Sum of interior Angles = $180(n-2)$

$180(4-2)$

$180(2) = 360°$

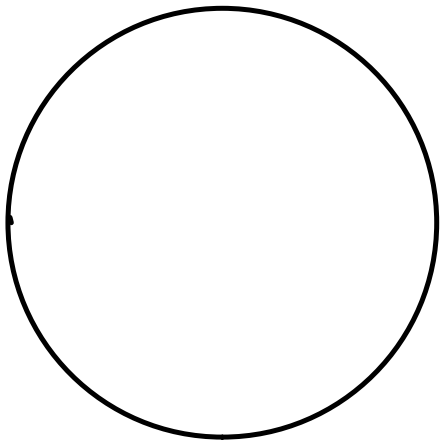


b) $180(n-2) = 540°$

$n = 5$

c) $1080°$

$d = 40 \quad r = \frac{40}{2} = 20\,m$



$C = d\pi = 40(3.14)$
$= 125.6$

$A = \pi r^2 = 3.14(20)^2$
$= 1256.$

4 sections

1st: $CA = 40°$

2nd: $CA = 25°$

3rd: $\frac{1}{4}$ of remainder $74°$

4th: $221°$

$360 - 40 - 25 = \frac{295}{4} = 74°$

$295 - 74 =$

$2cm = 1m \qquad \frac{2cm}{1m} = \frac{40cm = r}{20m}$

Attachments

iMaths__3_D_Graphics.wmv