## **FORMULEBLAD**

## 1. SPANNING EN VERVORMING

1.1 Spanning = 
$$\frac{\text{Krag}}{\text{Oppervlakte}}$$
 of  $\sigma = \frac{F}{A}$ 

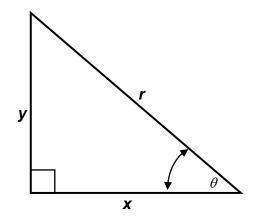
1.2 Young se modulus = 
$$\frac{\text{Spanning}}{\text{Vervorming}}$$
 of  $E = \frac{\sigma}{\varepsilon}$ 

1.3 Vervorming = 
$$\frac{\text{Verandering in lengte}}{\text{Oorspronklike lengte}}$$
 of  $\varepsilon = \frac{\Delta I}{oI}$ 

$$1.4 \qquad A_{as} \qquad = \qquad \frac{\pi D^2}{4}$$

1.5 
$$A_{pyp} = \frac{\pi \left(D^2 - d^2\right)}{4}$$

## 2. STELLING VAN PYTHAGORAS EN TRIGONOMETRIE



2.1 
$$\sin \theta = \frac{y}{r}$$

2.2 
$$\cos \theta = \frac{x}{r}$$

2.3 
$$\tan \theta = \frac{y}{x}$$

2.4 
$$r^2 = x^2 + y^2$$
 of  $a^2 = b^2 + c^2$ 

## 3. PATRONE EN ONTWIKKELINGS

- 3.1 Gemiddelde  $\emptyset$  = Buite- $\emptyset$  Plaatdikte of Gemiddelde  $\emptyset$  = Binne- $\emptyset$  + Plaatdikte
- 3.2 Gemiddelde omtrek =  $\pi \times$  Gemiddelde Ø