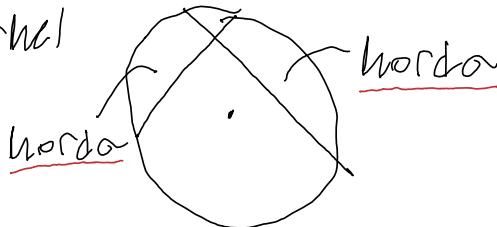


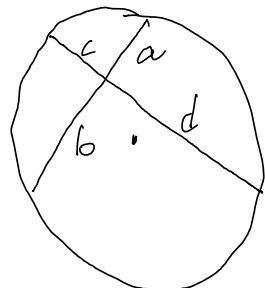
Hordasatsen och bisektatissatsen

Hordasatsen

En horda är en sträcka som går igenom en cirkel

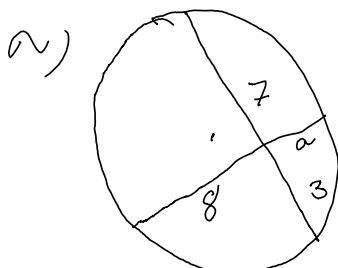


Hordasatsen säger:



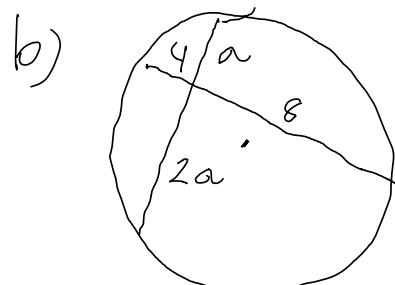
$$a \cdot b = c \cdot d$$

Ex) Bestäm sträckan α



$$\alpha \cdot 8 = 7 \cdot 3$$

$$\alpha = \frac{21}{8} \text{ l.e}$$



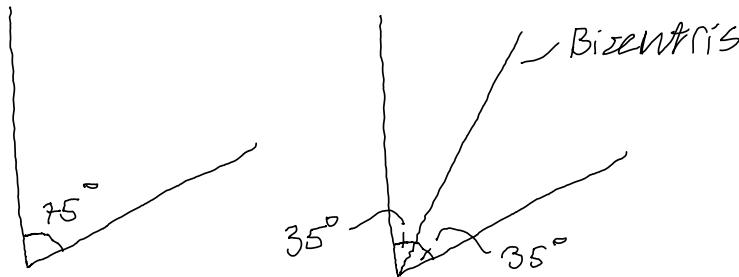
$$\alpha \cdot 2\alpha = 4 \cdot 8$$

$$2\alpha^2 = 32$$
$$\alpha^2 = 16$$

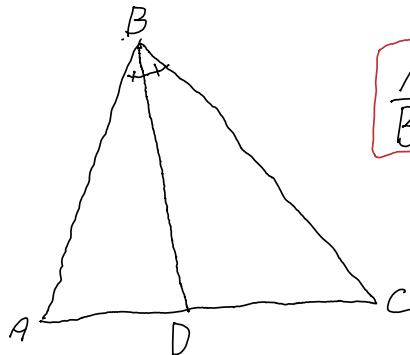
$$\alpha = \sqrt{16}$$

$$\text{Svar: } \alpha = 4 \text{ l.e}$$

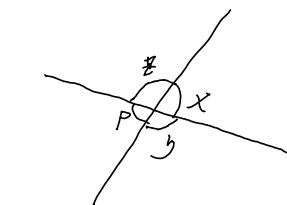
Bisektorsatsen En bisektör är en sträcka som delar en vinkel i två lika stora delor



Bisektorsatsen säger:



$$\frac{AB}{BC} = \frac{AD}{CD}$$



$$z+p=180^\circ$$

$$x+y=180^\circ$$

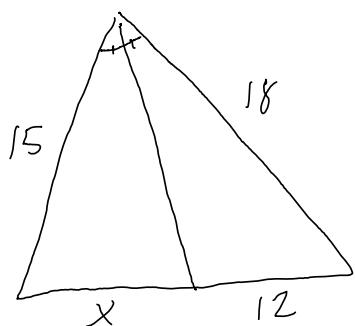
$$y+p=180^\circ$$

$$x+z=180^\circ$$

$$z=180^\circ-x$$

$$p=180^\circ-y$$

Ex) Bestäm sträckan x



$$\frac{x}{12} = \frac{15}{18}$$

$$x = \frac{15 \cdot 12}{18} = 10$$

Svar: $x=10$ l.e