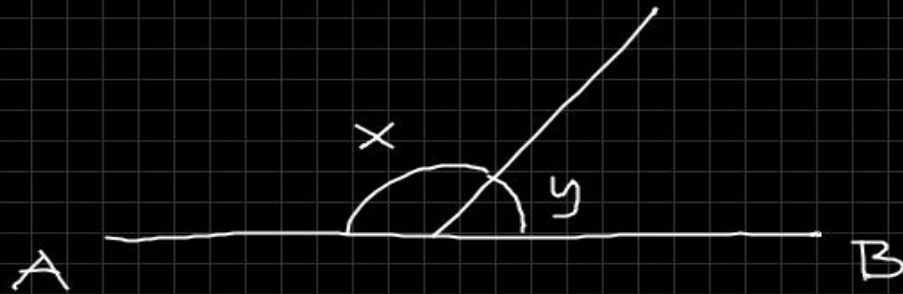


Kap 3. Bländede övningar. (s. 180-...)

①



$$x = 54^\circ + y$$

$$x + y = 180^\circ \quad (\text{rak vinkel})$$

$$\underbrace{54^\circ + y} + y = 180^\circ$$

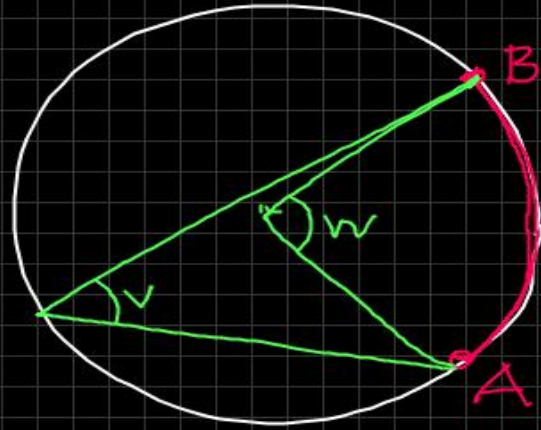
$$2y = 180^\circ - 54^\circ$$

$$y = \frac{126^\circ}{2}$$

$$y = 63^\circ$$

Svar:  $y = 63^\circ$

②



$$w = 2 \cdot v$$

③

Bestimm  $x$ .

Winkelsumme:

$$144^\circ = 104^\circ + x$$

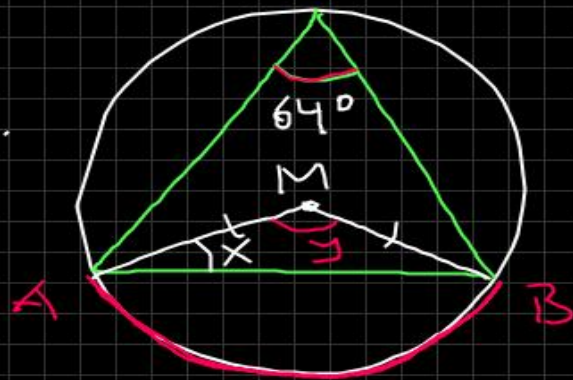
$$x = 40^\circ$$

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4) Beräkna vinkeln  $x$ .

$y =$  medelp.vinkel

$$y = 2 \cdot 64^\circ = 128^\circ$$



Likbent triangel:  $\triangle ABM$

$$\sphericalangle x = \sphericalangle MAB = \sphericalangle MBA = \sphericalangle x$$

(vinkelsumma)  $x + x + y = 180^\circ$

$$2x + 128^\circ = 180^\circ$$

$$x = \frac{180^\circ - 128^\circ}{2}$$

$$x = \frac{52^\circ}{2}$$

Svår:  $x = 26^\circ$

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⑤ Beräkna  $x$ .

Likformighet:

$$\triangle ABC \sim \triangle DEC$$

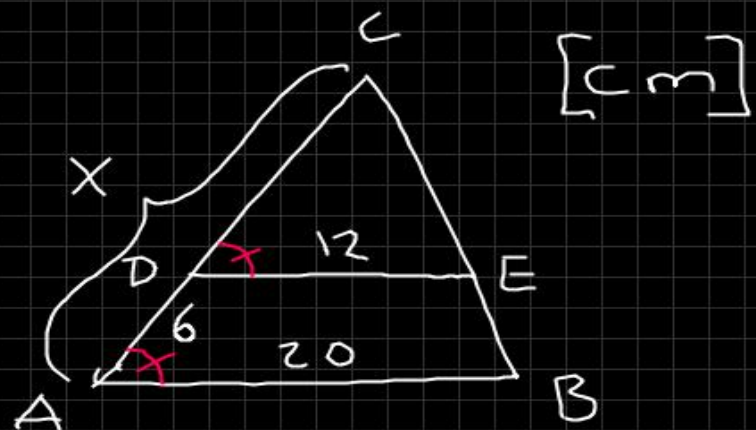
$$CD = x - 6$$

$$\frac{x-6}{12} = \frac{x}{20}$$

$$20(x-6) = 12x$$

$$20x - 120 = 12x$$

$$8x = 120$$



$$x = \frac{120}{8}$$

$$x = 15$$

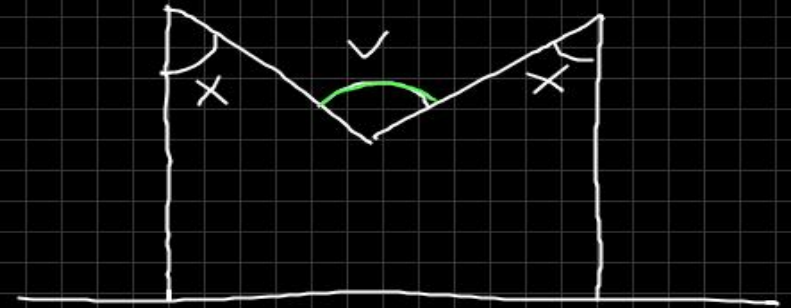
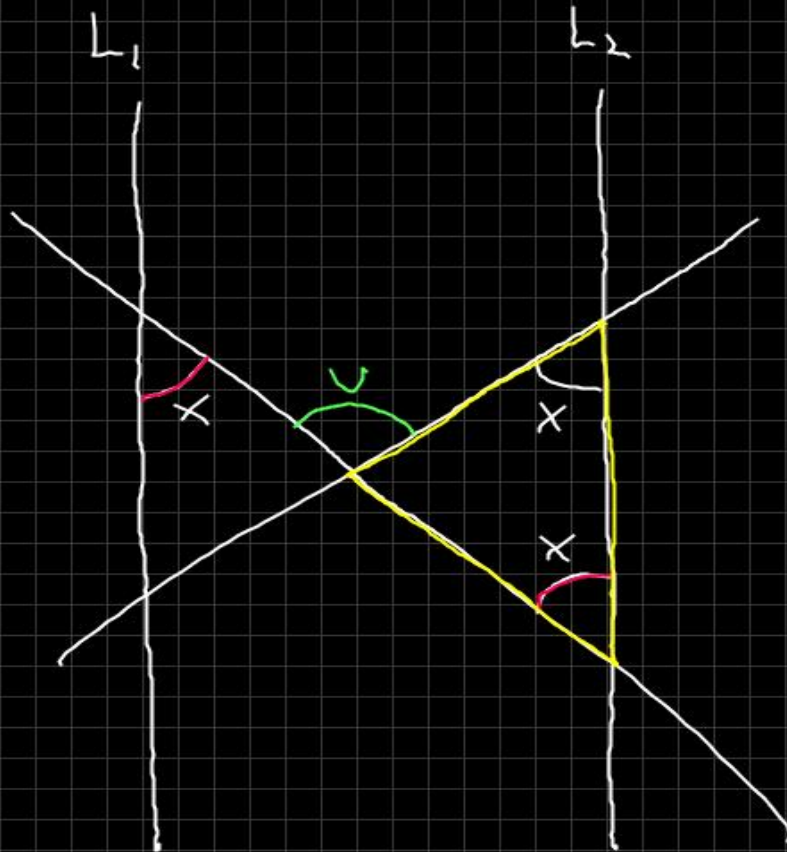
Svar:

$$x = 15 \text{ cm}$$

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Visa  $\hat{A}$   $v = 2x$



(NP)

Alternativwinkel

$$v = \text{Gegenswinkel} = 2x$$

$v \hat{=} v$ .