

17

$$f'(x) = 2x + 5$$

$$g'(x) = -10x + 14$$

$$\text{S t} f'(x) = g'(x).$$

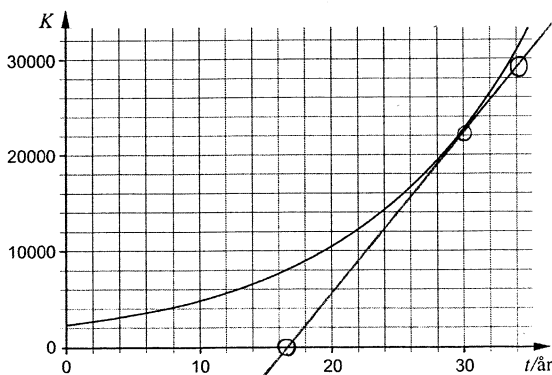
$$2x + 5 = -10x + 14$$

$$12x = 9$$

$$x = \frac{9}{12} = \frac{3}{4}$$

$$\underline{\text{Svar: } x = \frac{3}{4}} \quad (x = 0,75)$$

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Rita in en tangent

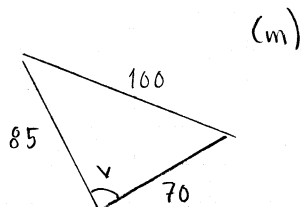
Tangentens l rning

$$\frac{29000 - 0}{34 - 17} = 1700$$

(a) Svar  $K'(30) \approx 1700$

(b) Svar: Exakt 20  r efter starten 1977  kar antalet g ss med <sup>hastigheten</sup> 800 g ss per  r.

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Cosinussatsen ger

$$100^2 = 85^2 + 70^2 - 2 \cdot 70 \cdot 85 \cos v$$

$$\cos v = \frac{85^2 + 70^2 - 100^2}{2 \cdot 70 \cdot 85}$$

$$\cos v \approx 0,1786$$

$$v = 79,71^\circ$$

Areassatsen ger nu

$$\text{arean} = \frac{85 \cdot 70 \cdot \sin 79,71^\circ}{2} \text{ m}^2$$

$$= 2927 \text{ m}^2$$

Svar: 2900 m<sup>2</sup>