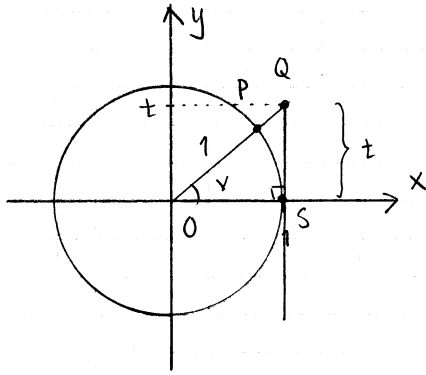


23



(Rätvinklig triangel L // y-axeln)

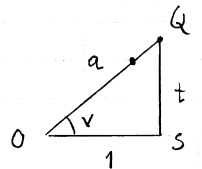
Låt OQ ha längden a . Pythagoras sats i OQS ger

$$a^2 = 1^2 + t^2$$

$$a = \pm \sqrt{1 + t^2}, \quad a > 0$$

 OQS är en rätvinklig triangel. Vi får $(\cos y = \frac{\text{närl}}{\text{hyp}})$

$$\cos y = \frac{1}{\sqrt{1 + t^2}} \quad (\underline{\underline{\text{Svar}}})$$



24

Derivatans definition:

$$s(x+h) = s(x) + h$$

$$s'(4) = \lim_{h \rightarrow 0} \frac{s(4+h) - s(4)}{h} = \lim_{h \rightarrow 0} \frac{s(4) + h - s(4)}{h}$$

$$= \lim_{h \rightarrow 0} \frac{h}{h} = \lim_{h \rightarrow 0} 1 = 1$$

$$\underline{\underline{\text{Svar}}}: s'(4) = 1$$