

Vraag	Antwoord	Scores
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## Bewegend punt

### 1 maximumscore 4

- $(1-t^2 = 0$  geeft  $t = -1$  of  $t = 1$ ;  $y(-1) = 0$ , dus) bij punt A hoort  $t = 1$  1
- $\frac{dx}{dt} = -2t$  en  $\frac{dy}{dt} = 2(1+t)$  1
- $\left[\frac{dx}{dt}\right]_{t=1} = -2$  en  $\left[\frac{dy}{dt}\right]_{t=1} = 4$  1
- De snelheid is  $(\sqrt{(-2)^2 + 4^2} =) 2\sqrt{5}$  (of  $\sqrt{20}$ ) 1

### 2 maximumscore 4

- $x + y = 1 - t^2 + 1 + 2t + t^2$  1
- $x + y = 2(1+t)$  (of  $x + y = 2 + 2t$ ) 1
- $(x + y)^2 = 4(1+t)^2$  1
- $4y = 4(1+t)^2$  (dus is  $(x + y)^2 = 4y$ ) 1

of

- Te bewijzen is  $(1-t^2 + (1+t)^2)^2 = 4(1+t)^2$  (voor elke waarde van  $t$ ) 1
- $1-t^2 + (1+t)^2 = 2+2t$  1
- $(2+2t)^2 = 4+8t+4t^2$  1
- $4(1+t)^2 = 4+8t+4t^2$  (dus is  $(x+y)^2 = 4y$ ) 1