Sand craters and dunes (10.0 points)

A. Impact craters

A.1 (0.6pt)

D (mm)					

$D =$ $\pm$ mm

A.2 (0.5pt)

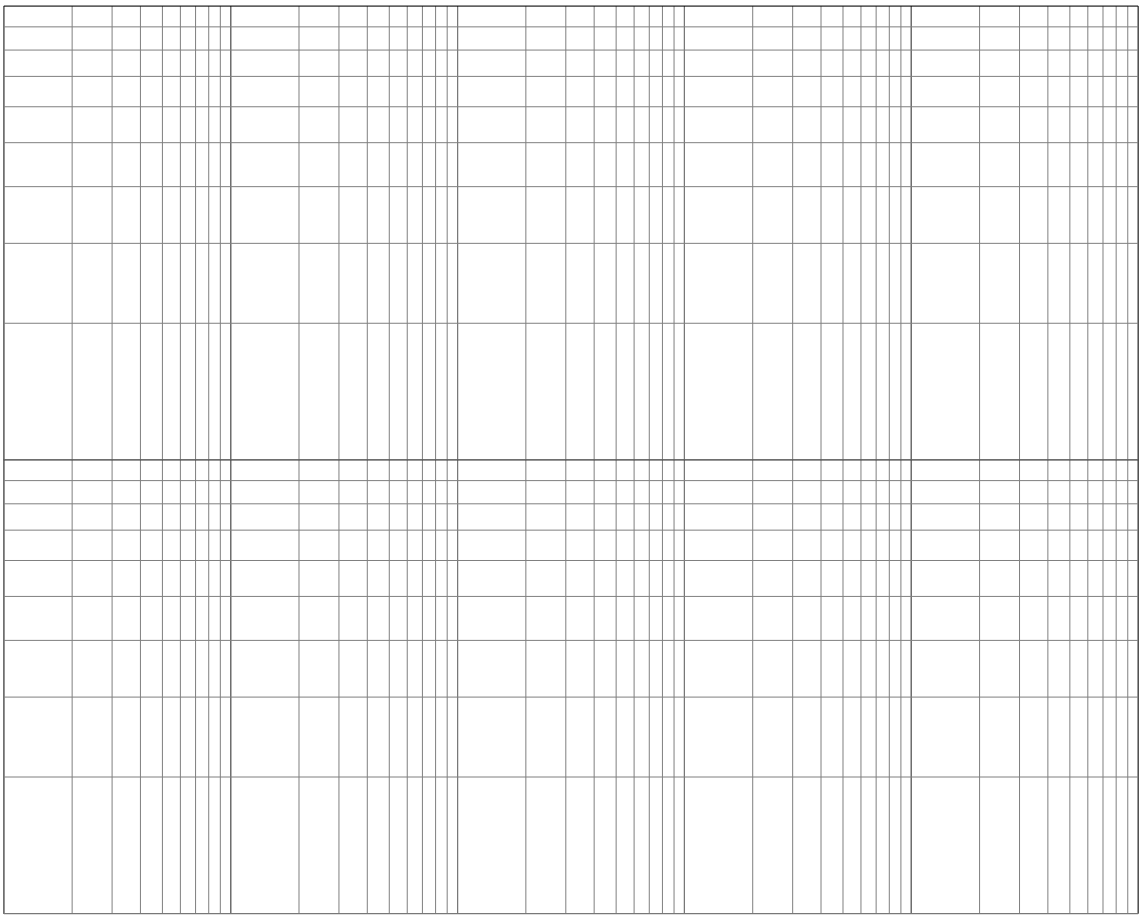
$h_{max} =$

d (mm)				
h_{max} (m)				

A.3 (1.7pt)

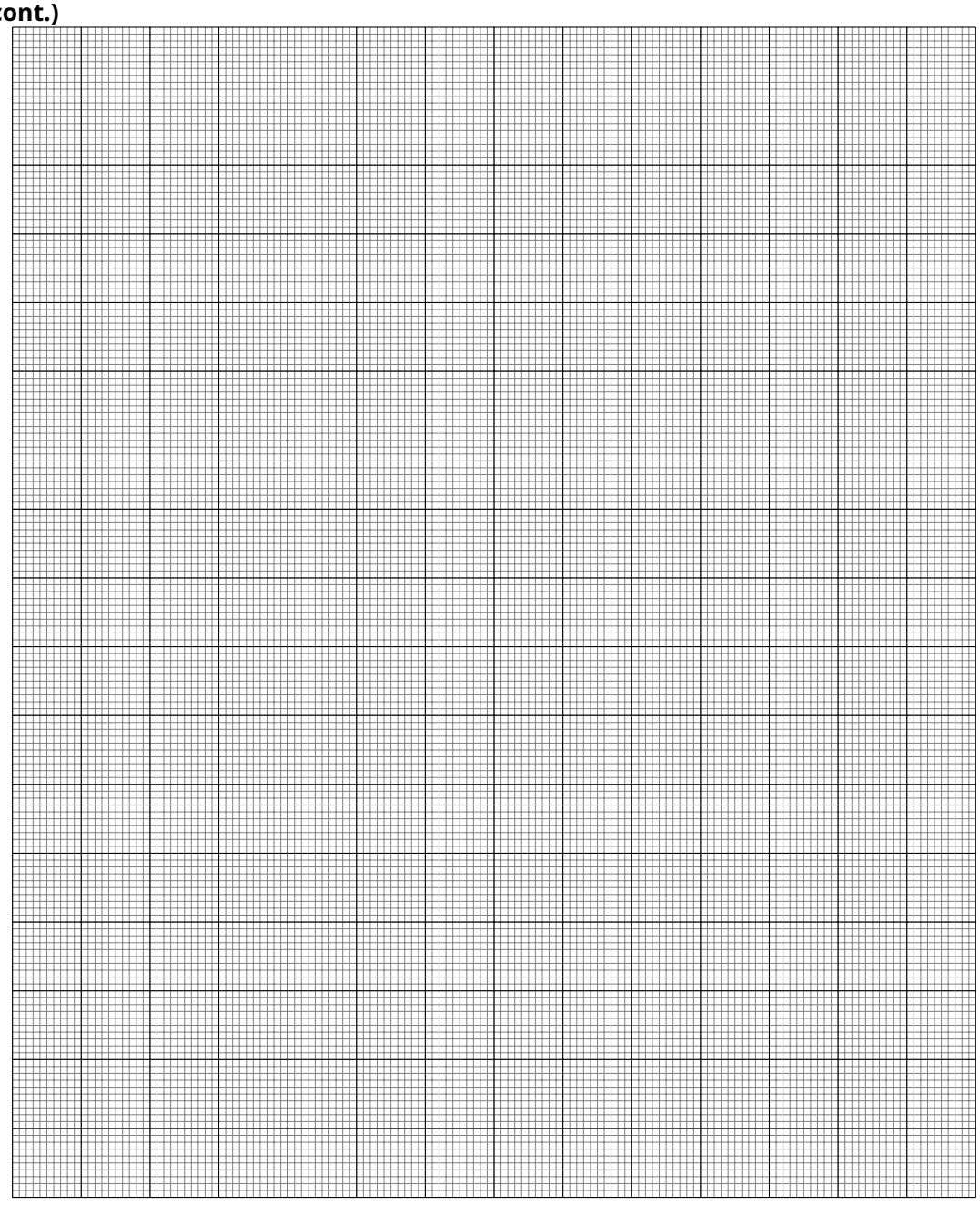
m (g)	h (cm)	E (J)	D (mm)

A.4 (1.2pt)



Conclusion:

A.4 (cont.)



Conclusion:

B. Rolling and bogging in sand

B.1 (0.4pt)

$x(t) =$

B.2 (0.7pt)

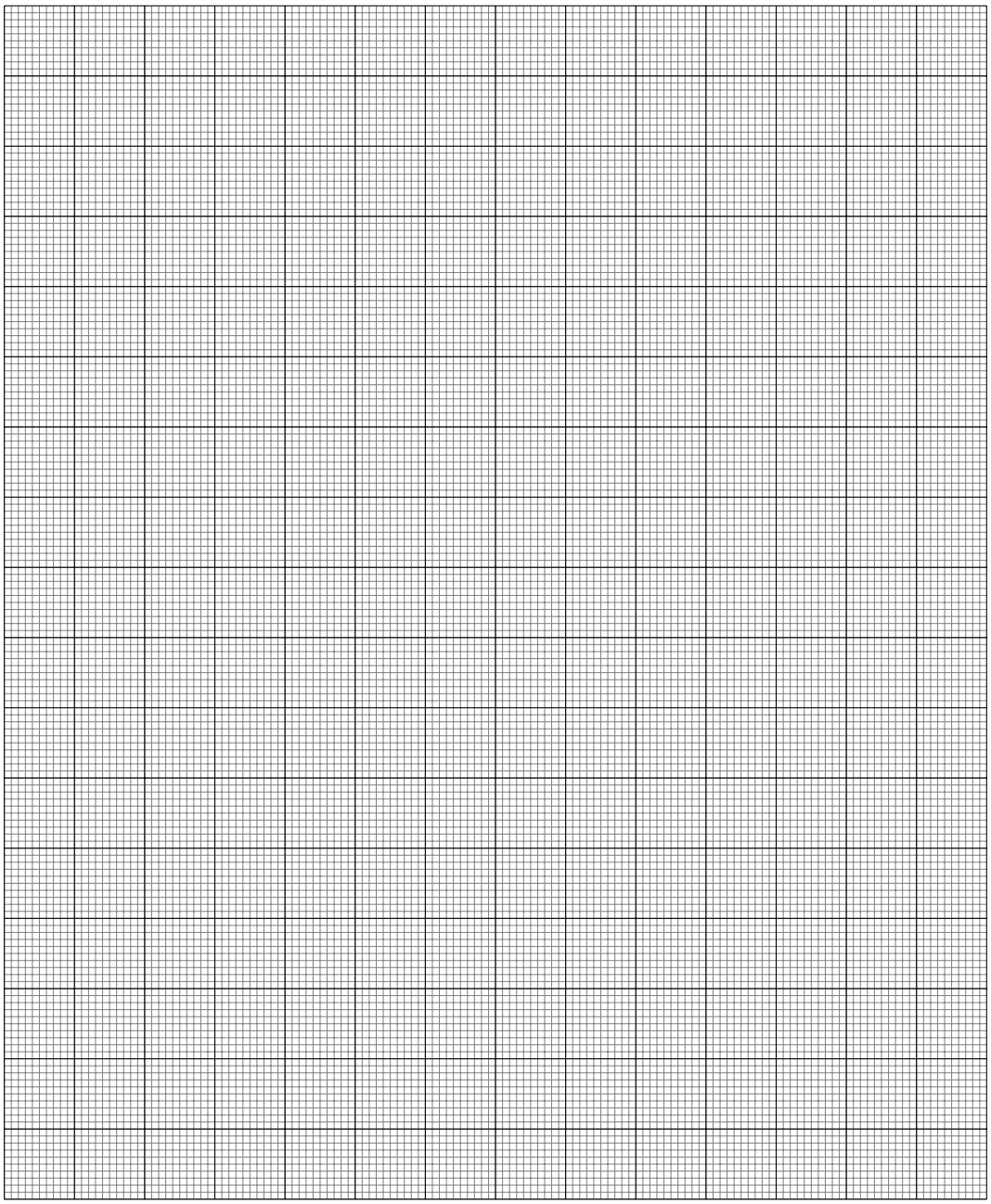
t_{50} (s)					

$t_{50} =$ $\pm$ s

B.3 (0.8pt)

ℓ (cm)	$t \pm \Delta t$ (s)

B.4 (1pt)



$g =$

B.5 (0.6pt)

Model 1:

- $L =$

- $\alpha =$

Model 2:

- $L =$

- $\alpha =$

B.6 (0.8pt)

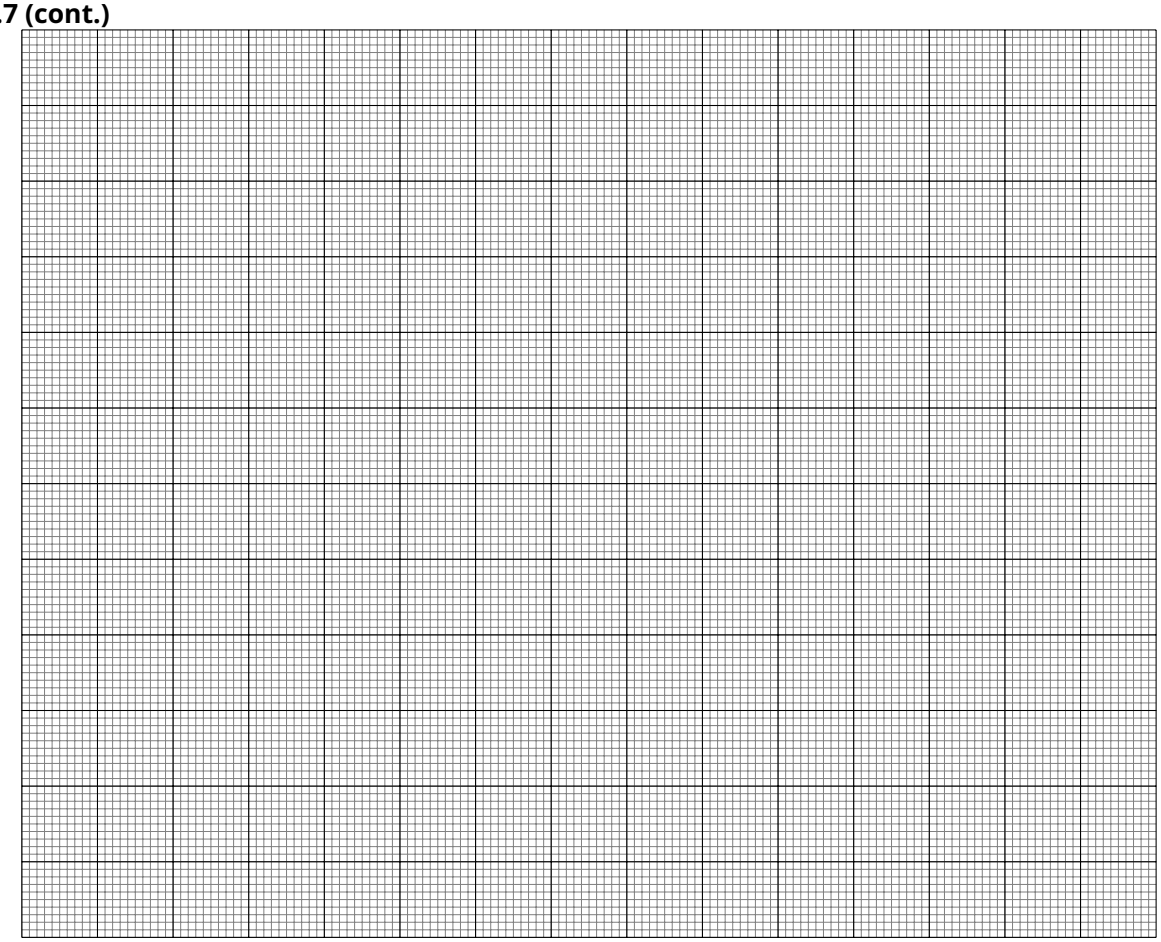
L_{50} (cm)					

$L_{50} =$ $\pm$ cm

B.7 (1.5pt)

ℓ (cm)	$L \pm \Delta L$ (cm)

B.7 (cont.)



The most suitable model is:

B.8 (0.2pt)

If the chosen model is model 1: $\mu_{\text{eff}} =$

If the chosen model is model 2: $k =$