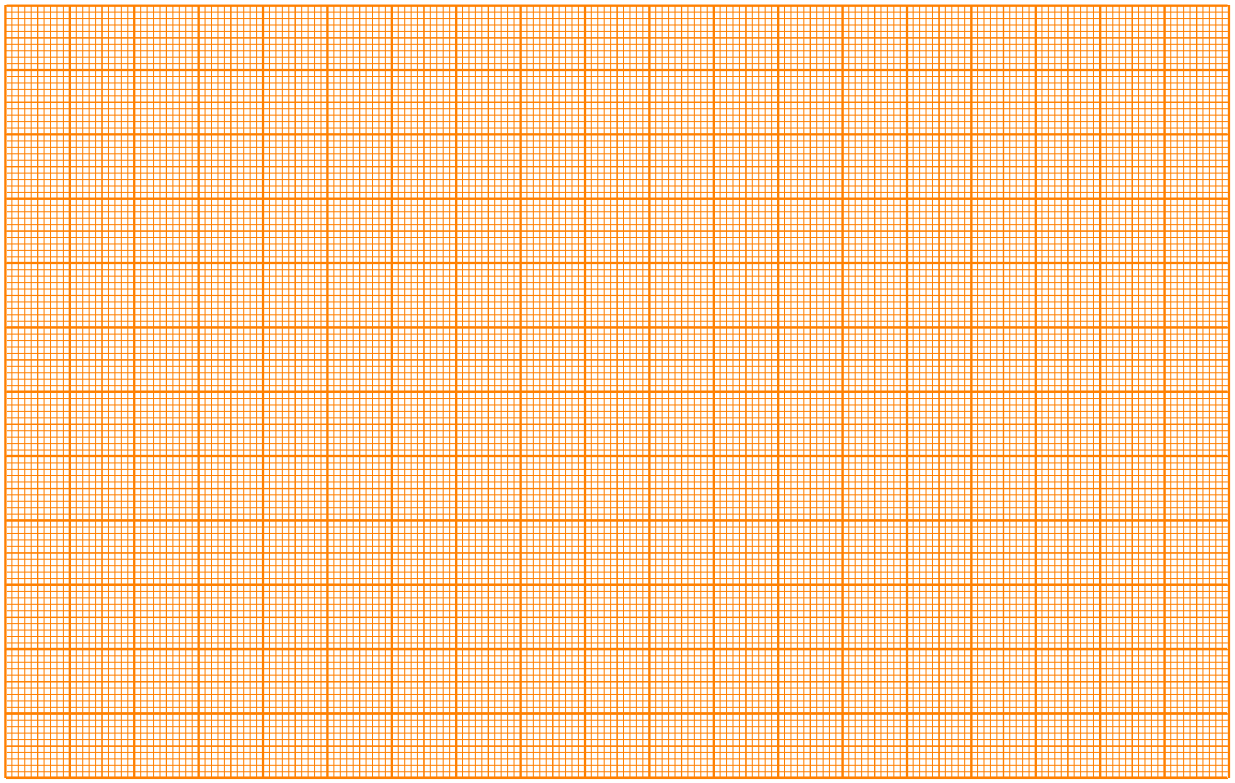
Part A. Planetary properties

A.1 (2.0 pt)

$g =$

$\Delta g =$

A.1 (cont.)



A.2 (0.5 pt)

$R =$

A.3 (0.5 pt)

$M =$

$\Delta M =$

Tick the effect that has the biggest influence on the accuracy of M.

Air resistance acting on the ball.	
Coriolis force $F_C = 2m\vec{v} \times \vec{\omega}$ acting on the ball, with m, $\vec{v}$ and $\vec{\omega}$ denoting the mass and velocity of the ball, and the angular velocity of the planet, respectively	
Higher order corrections to gravity from general relativity, the relative magnitude of which is on the order of the angle by which a photon is deflected due to the gravitational pull of the planet.	
Centrifugal force acting on the ball.	
Variations in g due to distance to the planet changing over the course of the fall.	

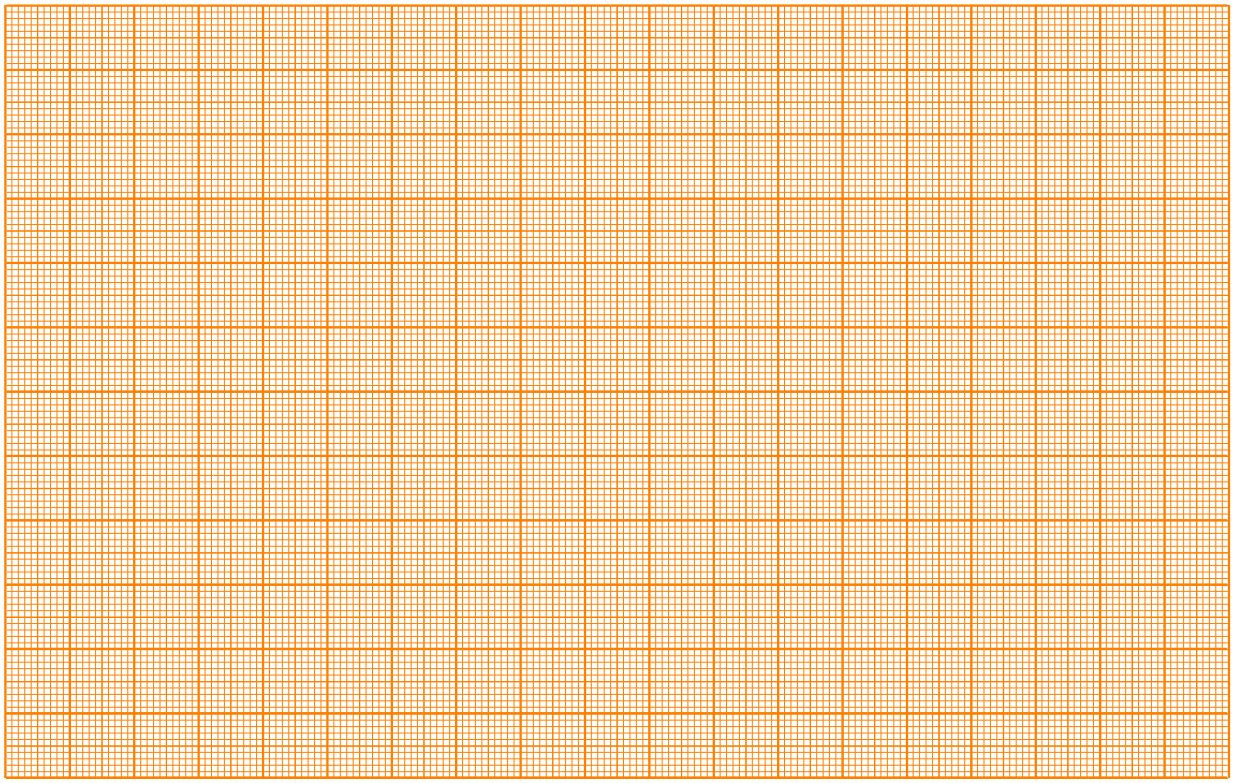
Part B. Atmospheric properties

B.1 (2.0 pt)

$u =$

$\Delta u =$

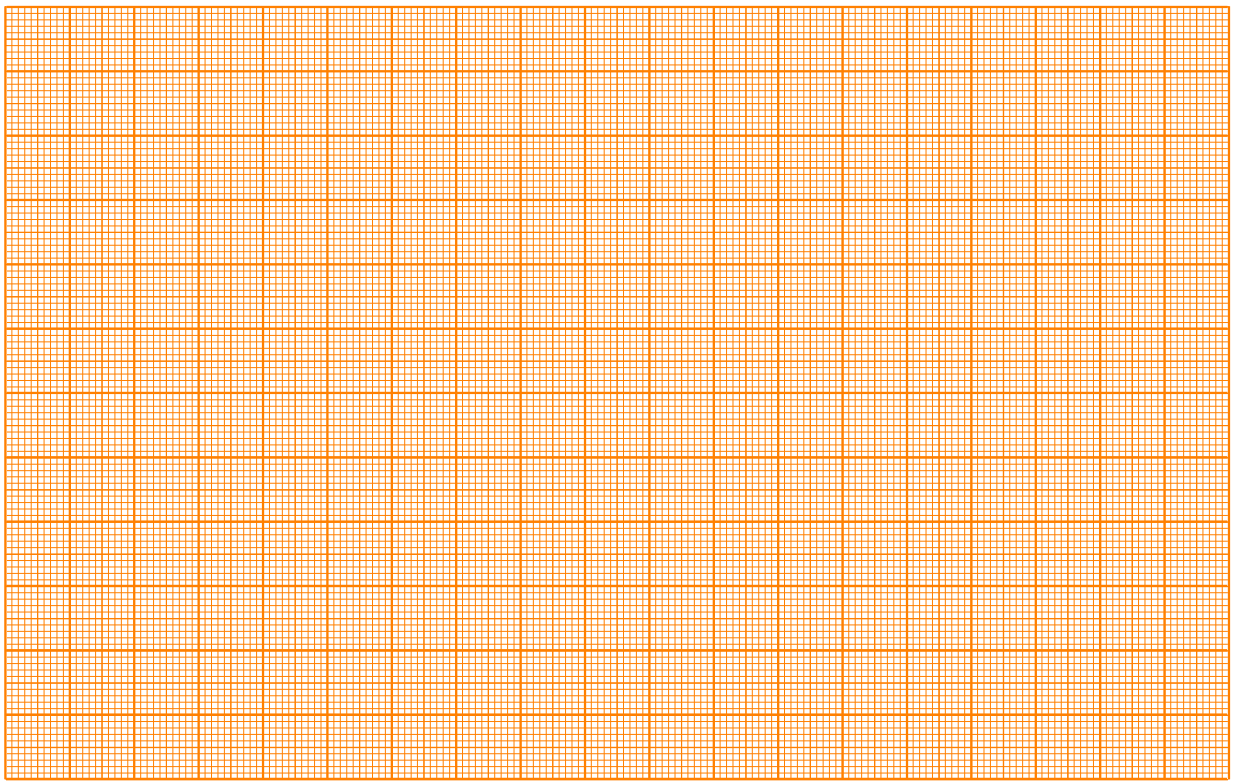
B.1 (cont.)



B.2 (1.0 pt)

$\rho_{a0} =$

$\Delta\rho_{a0} =$

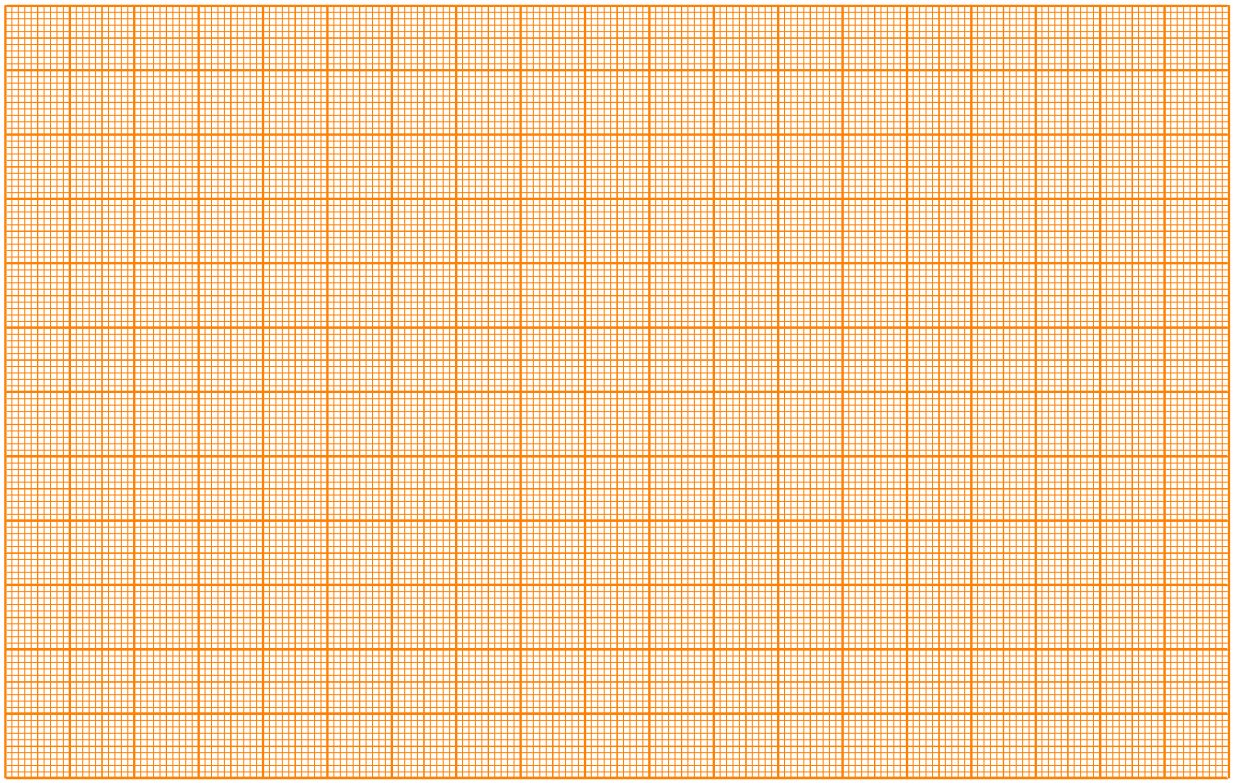


B.3 (3.0 pt)

$H_0 =$

$\Delta H_0 =$

B.3 (cont.)



B.4 (0.5 pt)

$\mu =$

$\Delta\mu =$

$p_0 =$

$\Delta p_0 =$

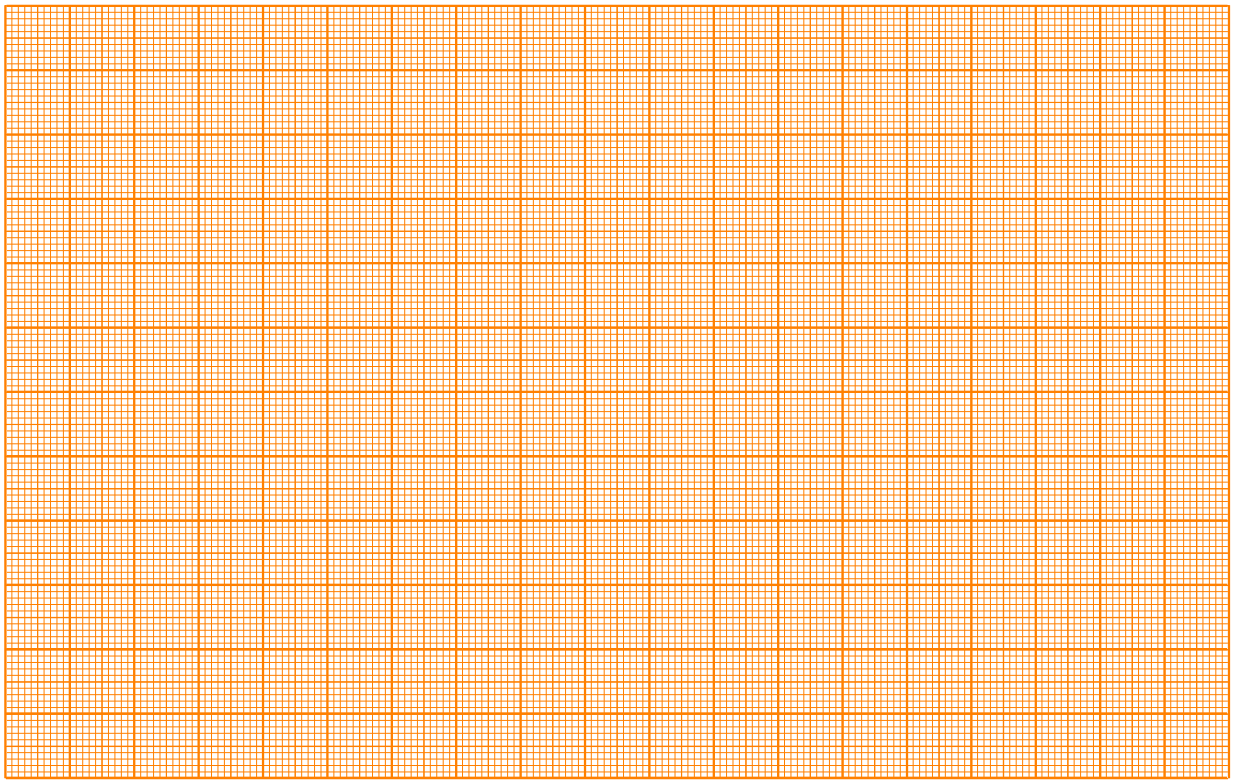
Part C. Duration of a day

C.1 (2.5 pt)

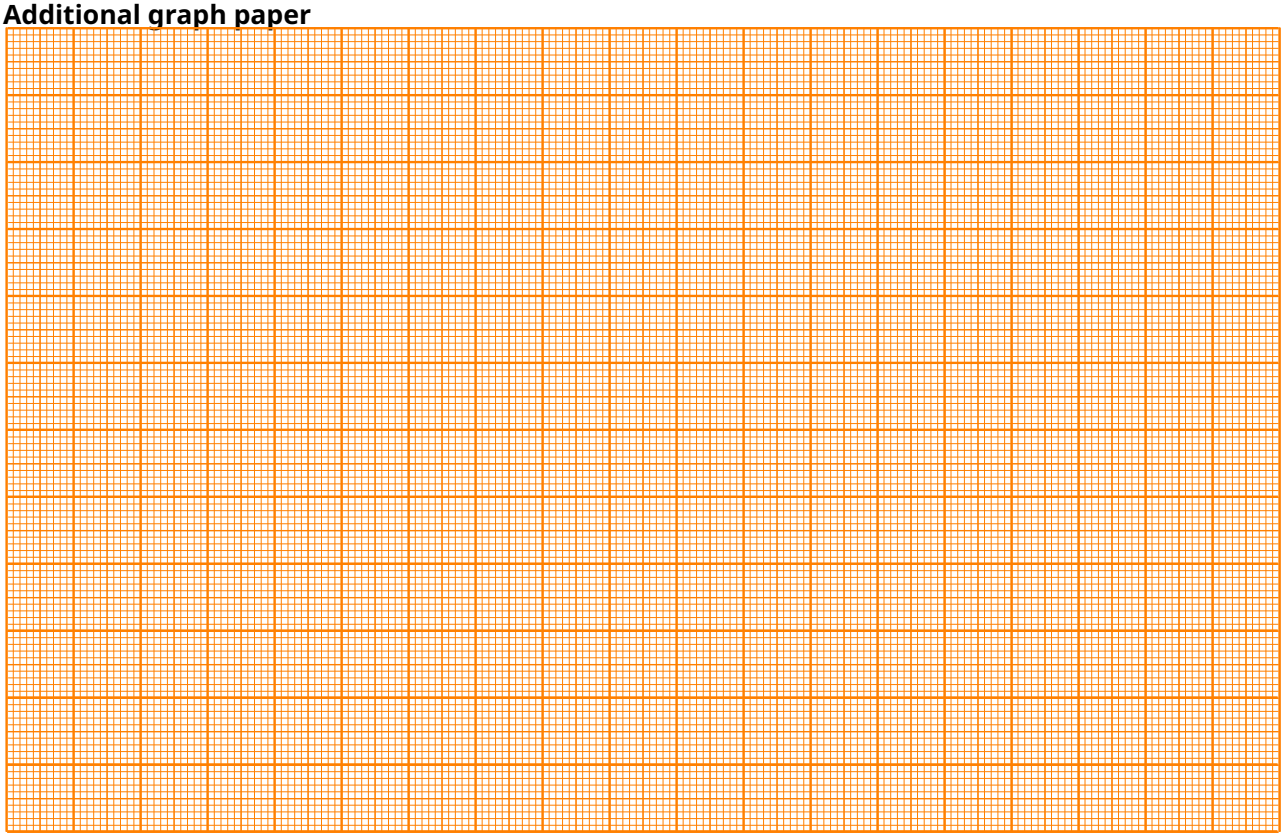
$T_p =$

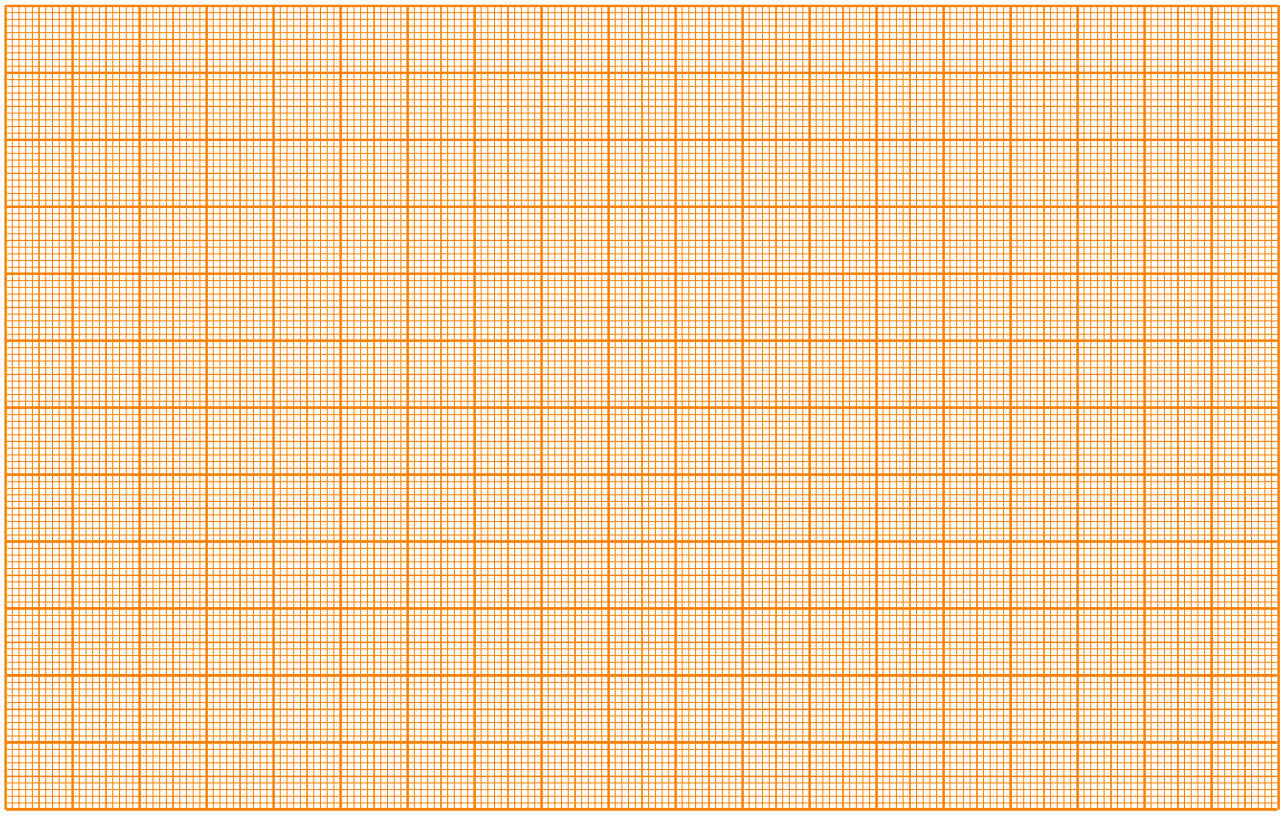
$\Delta T_p =$

C.1 (cont.)

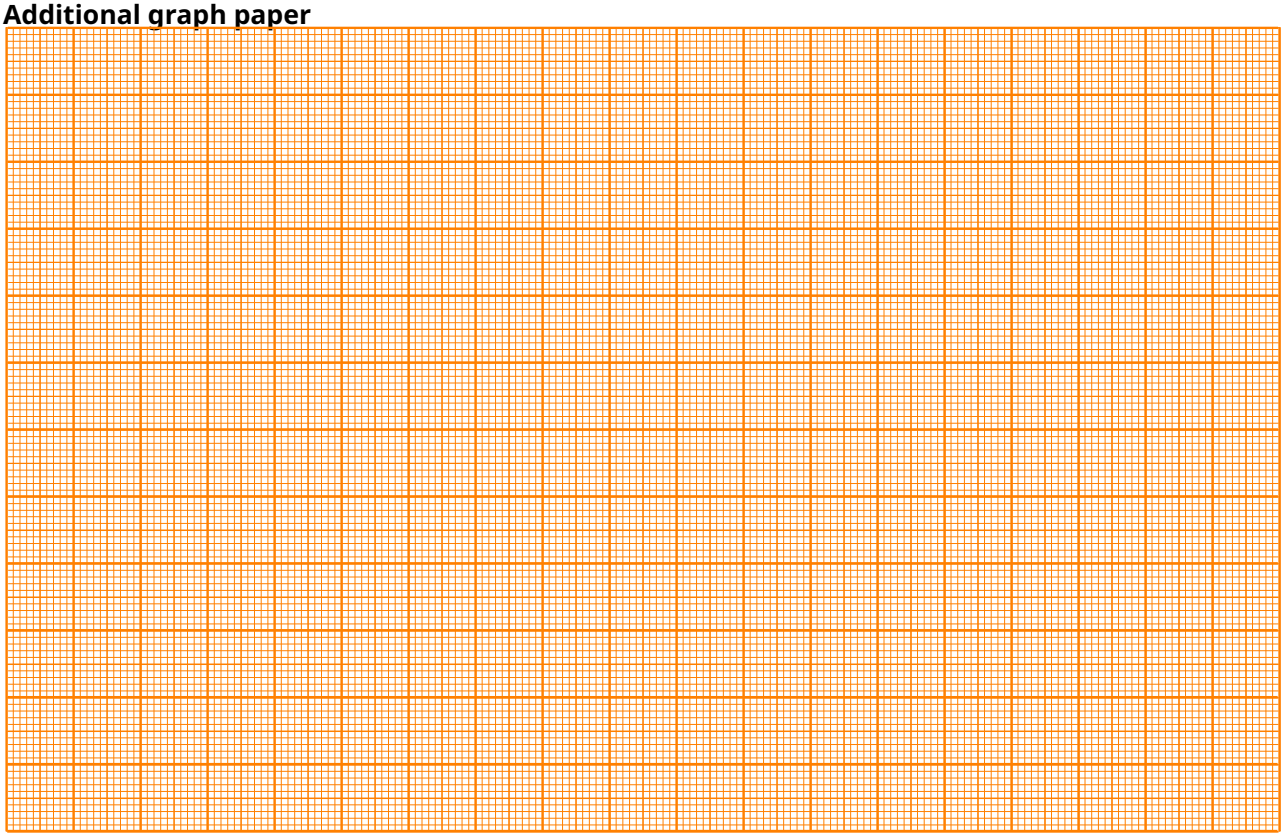


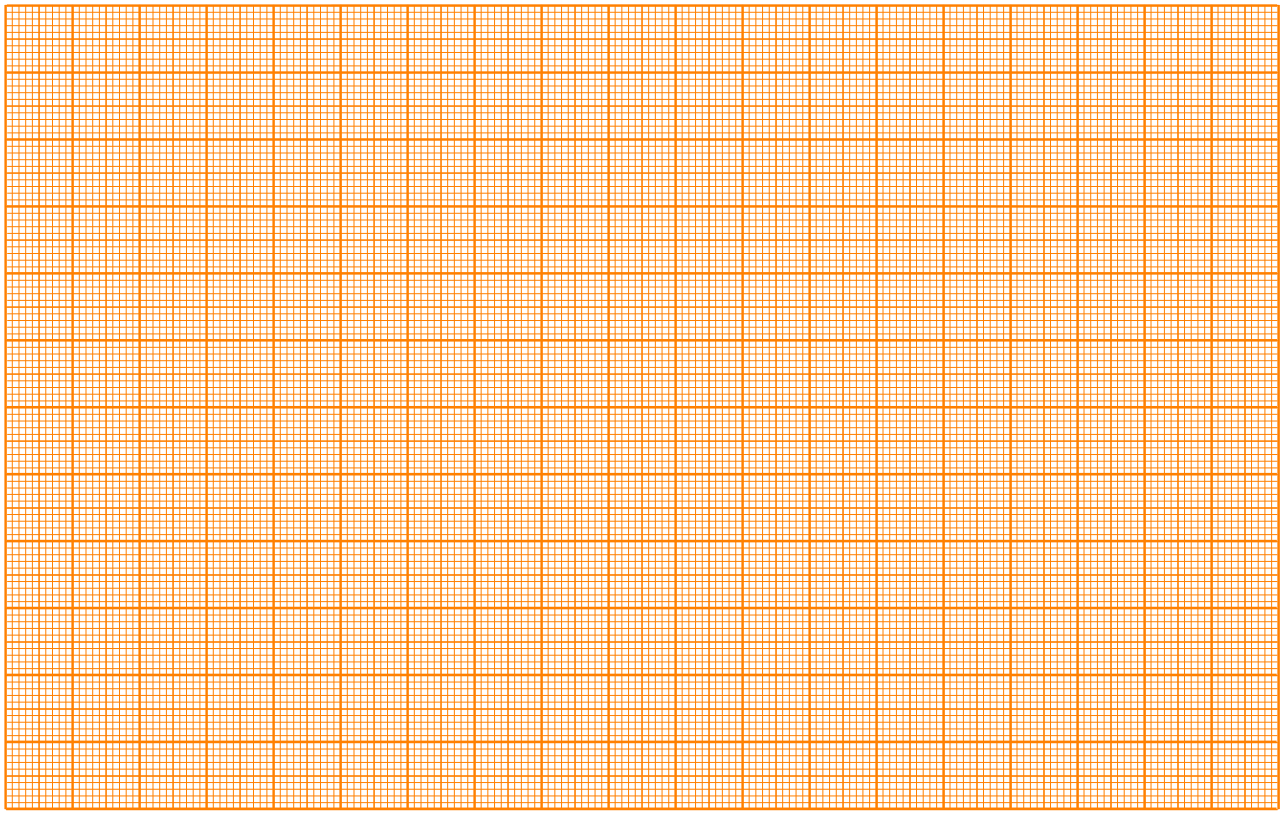
Additional graph paper





Additional graph paper





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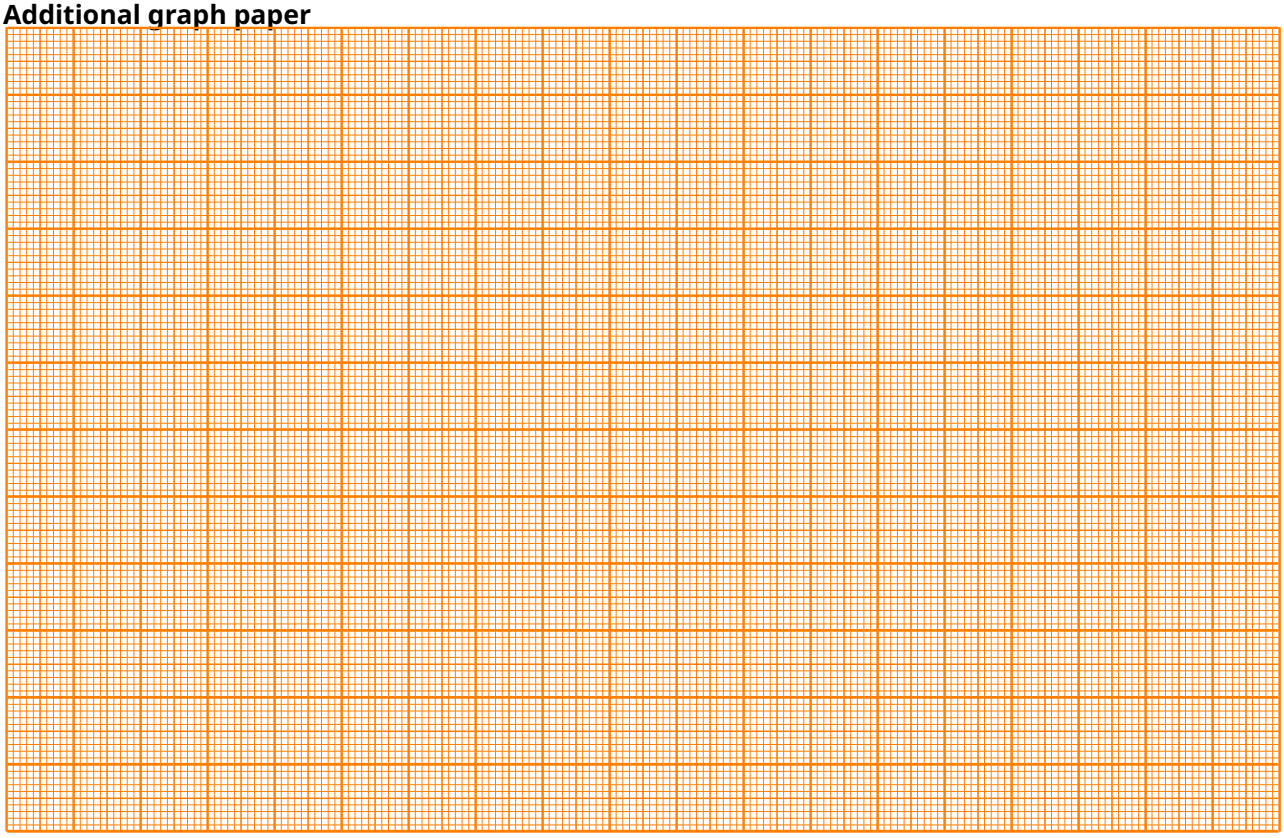
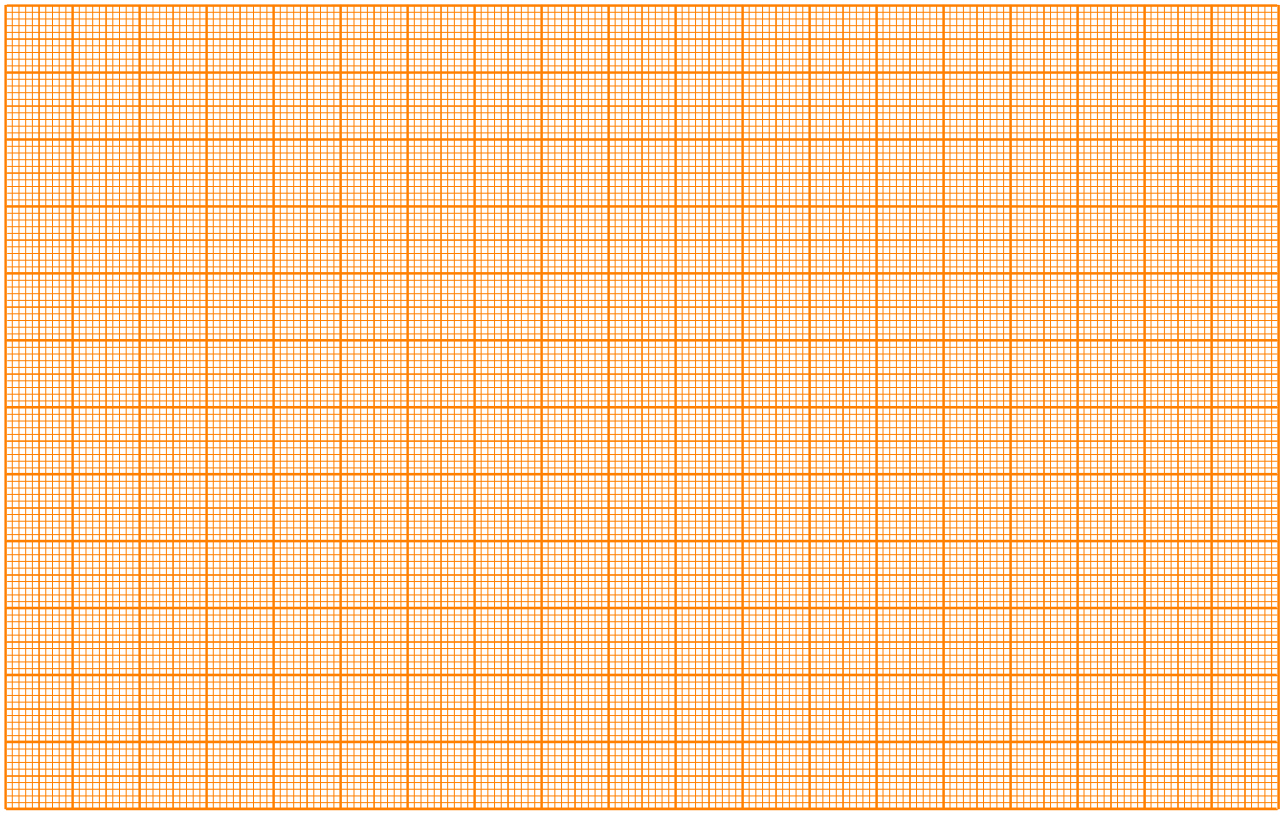
English (Official)

Additional graph paper

Additional graph paper





Experiment

A1-15

English (Official)