MATHEMATICS

FORM 2

MID-TERM 1 EXAMS 2021

TIME: 1 HR

**INSTRUCTIONS**: *Answer all questions in the spaces provided*

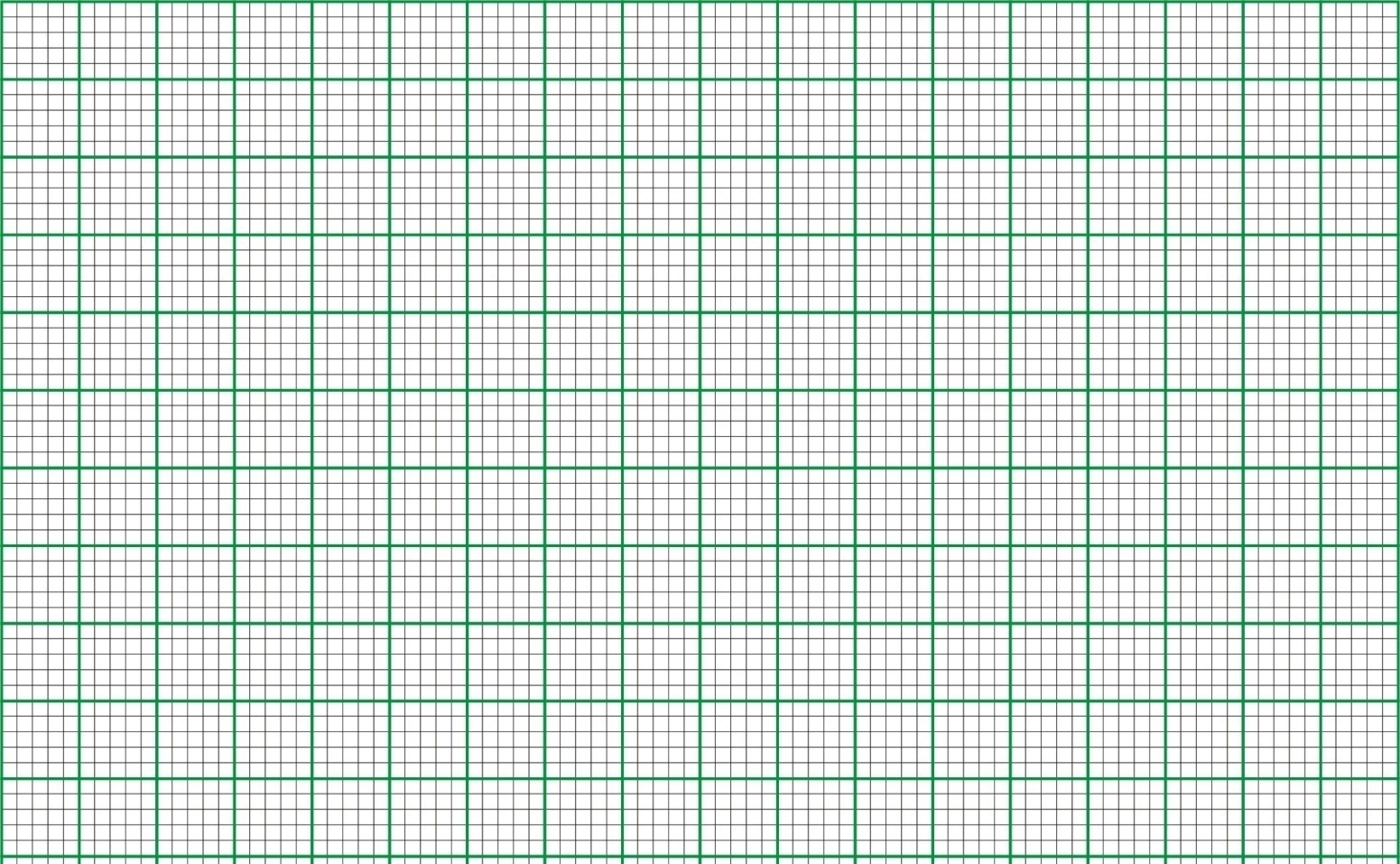
1. Simplify (3mks)
2. Using mathematical tables, find the value of (3mks)
3. (2mks)
4. (a) Determine the gradient and the y-intercept of the following equation (3mks)

(b) Find an equation perpendicular to the line and passing through point (2, 6) (4mks)

1. The volume scale factor of two similar cylinders is 27. Find;
   1. The linear scale factor (2mks)
   2. The area scale factor (1mk)
2. By substitution method, solve the following simultaneous equations

(3mks)

1. A quadrilateral has vertices P(-3,7), Q(-5,3), R(-3,1), and S(-1,3).
   1. On the grid provided, draw the quadrilateral and name it (2mks)



* 1. Find the equation of the line of symmetry of the quadrilateral formed in (a) above.

(2mks)

* 1. Draw the image of quadrilateral PQRS under a reflection in the line and give the coordinates of the image. (3mks)
  2. Find the equation of the line of symmetry of the image (2mks)