

Subject: Mathematics

Total Marks: 35

1. 3 rais to 0 ?.

Marks: 1

2. If two or more points lie on the same line, they are called \_\_\_\_\_.

Marks: 2

3. Solve for the area of a square with side length 5 units.

Marks: 2

4. Calculate the area of a trapezoid with bases 6 units and 8 units and height 5 units.

Marks: 2

5. Calculate the perimeter of a rectangle with length 10 units and width 4 units.

Marks: 2

6. Solve for x:  $2x + 5 = 15$ .

Marks: 2

7. If angle A is 45 degrees, what is the measure of its complementary angle?

Marks: 2

8. What is the area of a parallelogram with base 7 units and height 9 units?

Marks: 2

9. Solve the equation  $\log(x) = 3$ .

Marks: 2

10. What is the value of Pi?

Marks: 2

11. Determine the equation of a line perpendicular to  $y = 2x + 3$  that passes through the point (4, 7).

Marks: 3

12. Determine the area of a rectangle with length 12 units and width 8 units.

Marks: 3

13. Determine the surface area of a sphere with a radius of 9 units.

Marks: 3

14. Solve the Navier-Stokes equations for an incompressible fluid in three dimensions.

Marks: 5

15. 3 rais to 0 ?.

Marks: 1