



Time 1 hour 45 min

Mock Test FA3 ix

MM.40

1 Mark Each

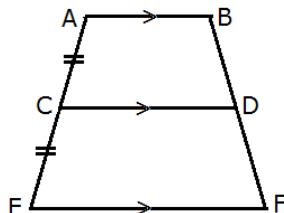
1. The equation $2x + 5y = 7$ has a unique solution if x and y are _____
2. If APB and CQD are two parallel lines then bisectors of the angles APQ, BPQ, CQP and PQD from a _____
3. The distance between graphs of $x = -2$, $x = 3$ is _____ units.
4. Write equation of a line parallel to y axis and intersecting x axis at 5.

2 Marks Each

5. The angles of a quadrilateral are in ratio 3:2:7:6. The quadrilateral is a _____
6. Determine the point on the graph of the equation $4x + 5y = 30$ whose x coordinate is $\frac{5}{2}$ times its ordinate.
7. For what value of c if the linear equation $5x - cy = 11$ has equal values of x and y .
8. The diagonals AC and BD of parallelogram ABCD intersect each other at O. If $\angle DAC = 42^\circ$ $\angle AOB = \angle 72^\circ$, find $\angle DBC$.

3 Marks Each

9. ABC is an isosceles Δ with $AB = AC$, AY bisects exterior $\angle PAC$ and CX II AB intersects AY at D. Show (1) $\angle DAC = \angle BCA$ (2) ABCD is a II gm
10. In figure $AB \parallel CD \parallel EF$ and $AC = CE$. Prove $BD = DF$.



11. Ram is seated at point A (4, 3) and Sham is seated at point B(-4, -8). Write equation of path from Ram to Sham and represent graphically.
12. ABC is an isosceles triangle with $AB = AC$, D, E and F are midpoints of BC, CA and AB respectively. Show AD and EF bisect each other at right angles.



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4 Marks Each

13. Prove midpoint of hypotenuse of a right Δ is equidistant from the three vertices using converse of midpoint theorem.
14. Cost on stationary is directly proportional to number of pens bought. If 7 pens cost Rs. 91. Write a linear equation in 2 variable and represent graphically.
15. Solve $3x + 7 = 6$ and represent the solution/s on (a) number line (b) cartesian plan
16. Prove base angles and diagonals of an isosceles triangle are equal to each other.