

MM 30

Time 1h

1. Solve graphically $5x+2y=16$, $7.5x+3y=24$ (4)
2. Determine graphically the coordinates of the vertices of the triangle, the equations of whose sides are: $y = x$, $3y = x$, $x + y = 8$ (4)
3. Solve graphically $x - y = 10$, $2x - 5y = 5$ (4)
4. For what value of k will the equations $x + 2y + 7 = 0$, $2x + ky + 14 = 0$ have one solution. (3)
5. Solve $4x + 6y = 3xy$, $8x + 9y = 5xy$ given $(x \neq y, x \neq 0)$ (3)
6. Solve $\frac{1}{x} + \frac{1}{y} = 7$, $\frac{2}{x} + \frac{3}{y} = 17$ given $(x \neq y, x \neq 0)$ (3)
7. Solve each of the following system of equations by using the method of Cross Multiplication
 $(a - b)x + (a + b)y = a^2 - 2ab - b^2$, $(a + b)(x + y) = a^2 + b^2$ (3)
8. Solve $23x - 29y = 98$, $29x - 23y = 110$ (3)
9. Solve $\frac{x+y-8}{2} = \frac{x+2y-14}{3} = \frac{3x-12+y}{11}$ (3)

Answers for free paper cbsemath.com linear equations in one variable

1. No solution (parallel lines)
2. (0, 0) (4, 4) (6, 2)
3. $x = 15$, $y = 5$
4. $r \neq 4$
5. $x = 3$, $y = 4$
6. $x = \frac{1}{4}$, $y = \frac{1}{3}$
7. $x = a + b$, $y = \frac{-2ab}{a + b}$
8. $x = 3$, $y = -1$
9. $x = 2$, $y = 6$