

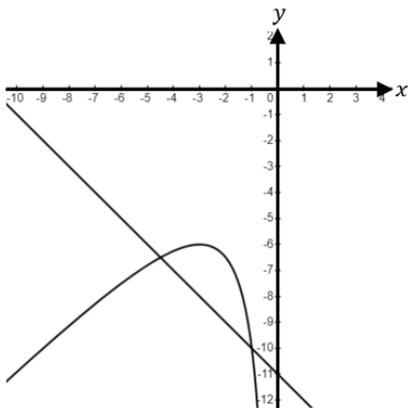
Non-Linear Simultaneous Equations

- (a) Solve algebraically $xy = 4$
 $y = x + 3$
- (b) Solve algebraically $xy = -8$
 $x + y = 2$
- (c) Solve algebraically $xy + 12 = 0$
 $x = 2 - 2y$

- (a) Solve algebraically $y = \frac{3}{x}$
 $2x = y - 1$
- (b) Solve algebraically $y = \frac{4}{x} - 2$
 $x = 4y + 8$
- (c) Solve algebraically $y = \frac{4}{x} + x$
 $x + y = 6$

- (a) Solve algebraically $x^2 + xy = 20$
 $x = 4y$
- (b) Solve $x^2 + y^2 - xy = 16$
 $x + y = 4$
- (c) Solve $x^2 - y^2 = 4 + xy$
 $y = 2x - 6$

The diagram shows the graphs of $y = x + \frac{9}{x}$ and $x + y + 11 = 0$. Find the coordinates of the points of intersection.



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