

ACTION

RESPONSE

Find the value of x and y for each of the simultaneous equations.

1. $x^2 + y^2 = 25$; $x + y = 7$

4. $y = x^2 + 2x - 3$; $y = 2x + 1$

2. $x^2 + y^2 = 9$; $y = x + 3$

5. $y = x^2 - 2x - 5$; $y = x - 1$

3. $x^2 + y^2 = 13$; $5y + x = 13$

6. $y = x^2 - 2x$; $y = 2x - 3$

Fluency

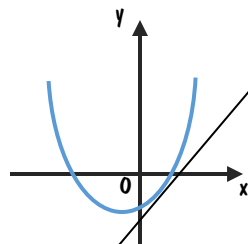
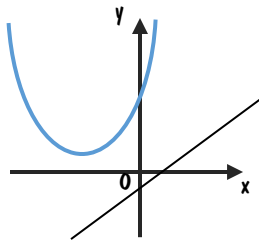
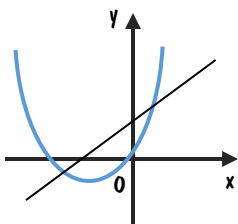


Reasoning



Solve the simultaneous equations: $y = x^2 + 3x - 4$; $y = 5x - 5$

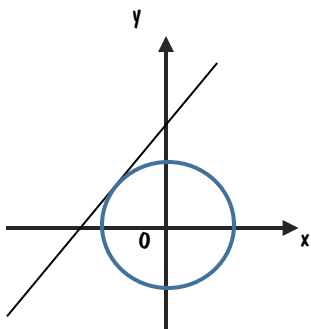
Identify which of the sketches represents the graphs of these equations and explain why.



Problem Solving



The simultaneous equations: $x^2 + y^2 = 5$ and $y = 2x + 5$ has only one solution.



a) Find the solution.

b) Write down the intersection of each pair of graphs.

i) $x^2 + y^2 = 5$ and $y = -2x + 5$

ii) $x^2 + y^2 = 5$ and $y = -2x - 5$

iii) $x^2 + y^2 = 5$ and $y = 2x - 5$



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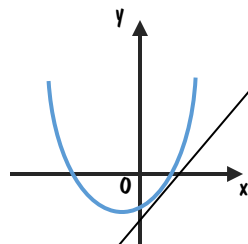
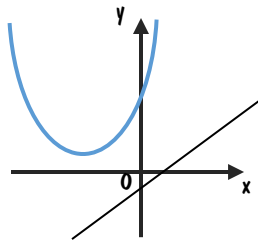
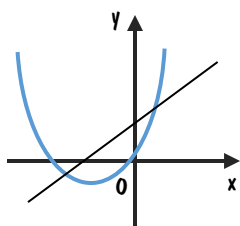


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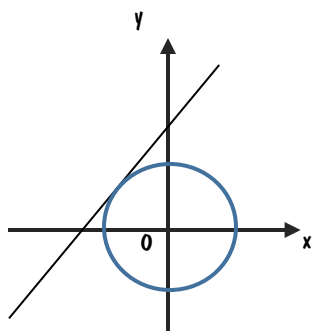
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