



THIRD SPACE
LEARNING

Solving systems of equations by graphing Worksheet

Algebra

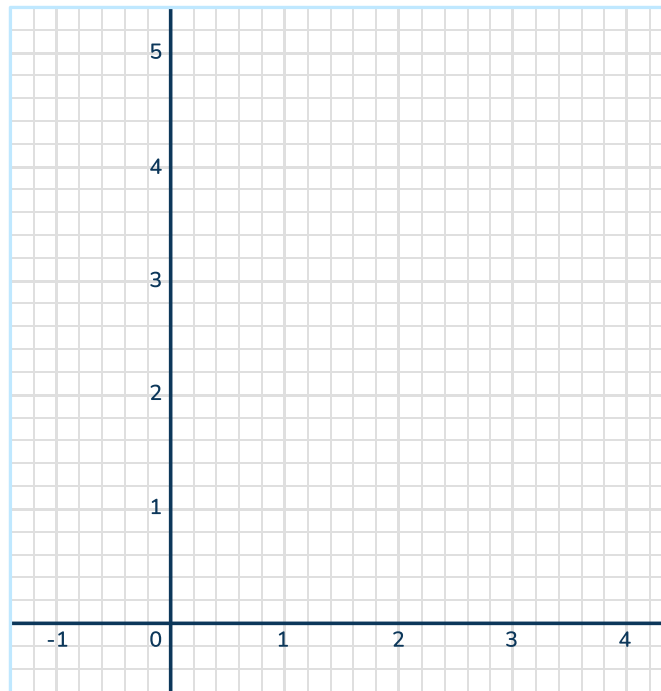
Grades 9 to 12

Questions

Name:

Date:

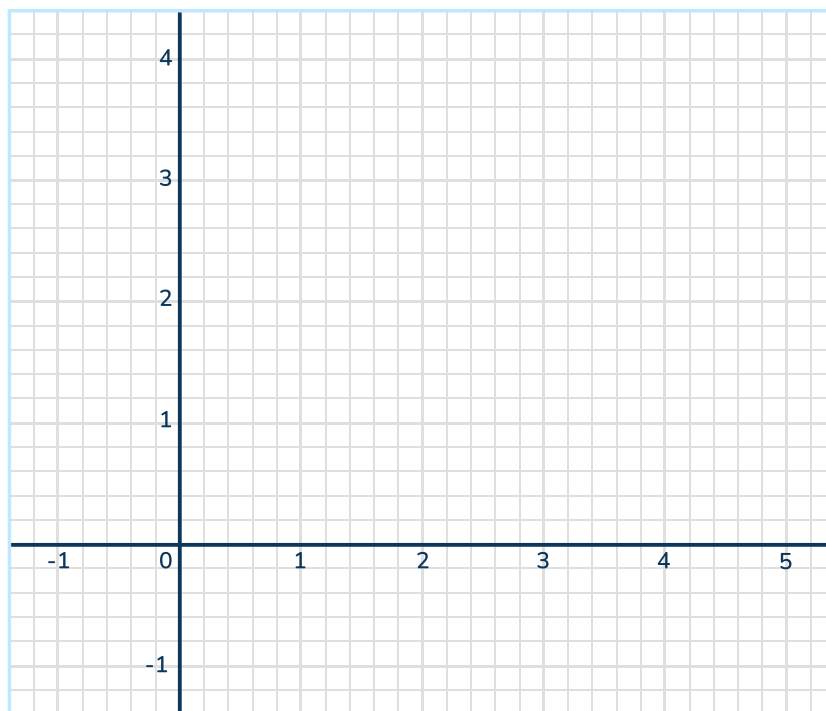
- 1 Solve the system by graphing: $y = 2x + 1$, $y = -x + 4$.



Answer

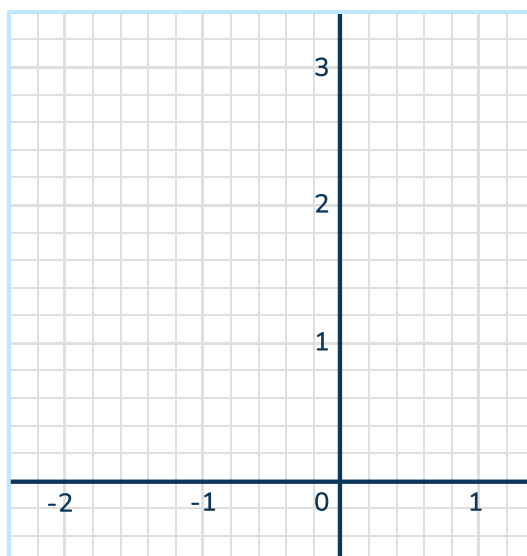
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2 Solve the system by graphing: $y = -3x + 6$, $y = x - 2$.



Answer

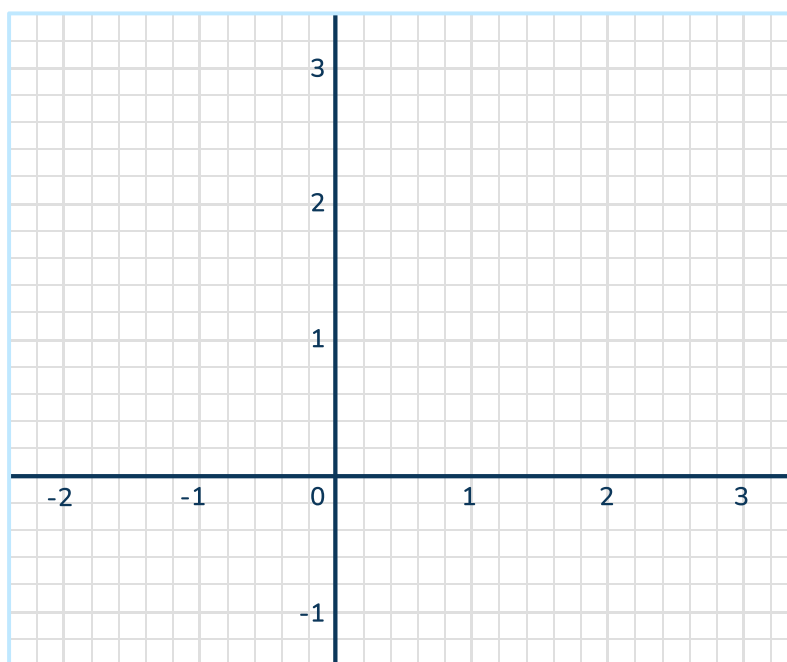
3 Solve the system by graphing: $y = 0.5x + 3$, $y = -2x - 1$.



Answer

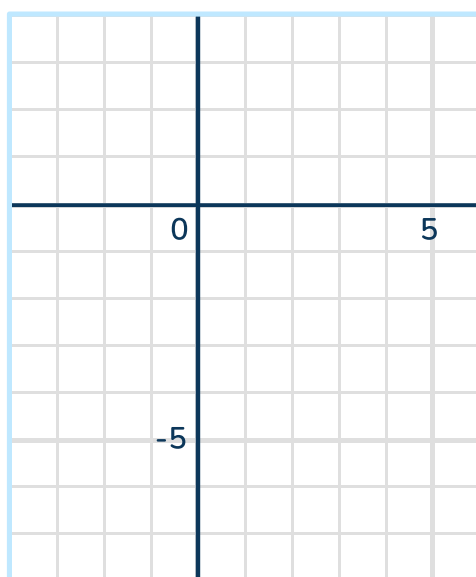
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4 Solve the system by graphing: $y = x + 2$, $y = x - 1$



Answer

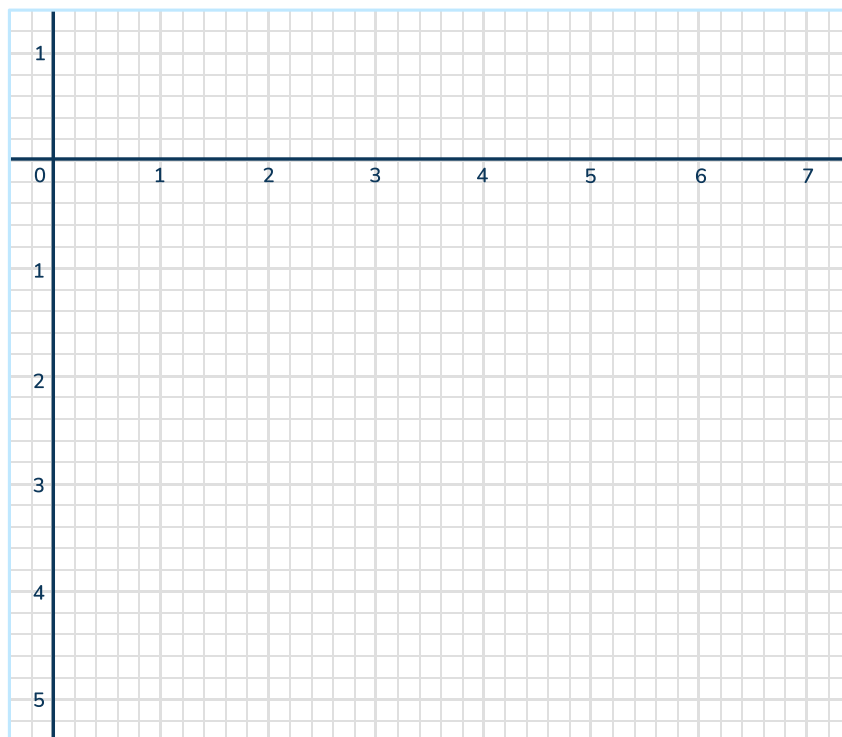
5 Solve the system by graphing: $y - 4x + 5 = 0$, $2y + 10 = 8x$.



Answer

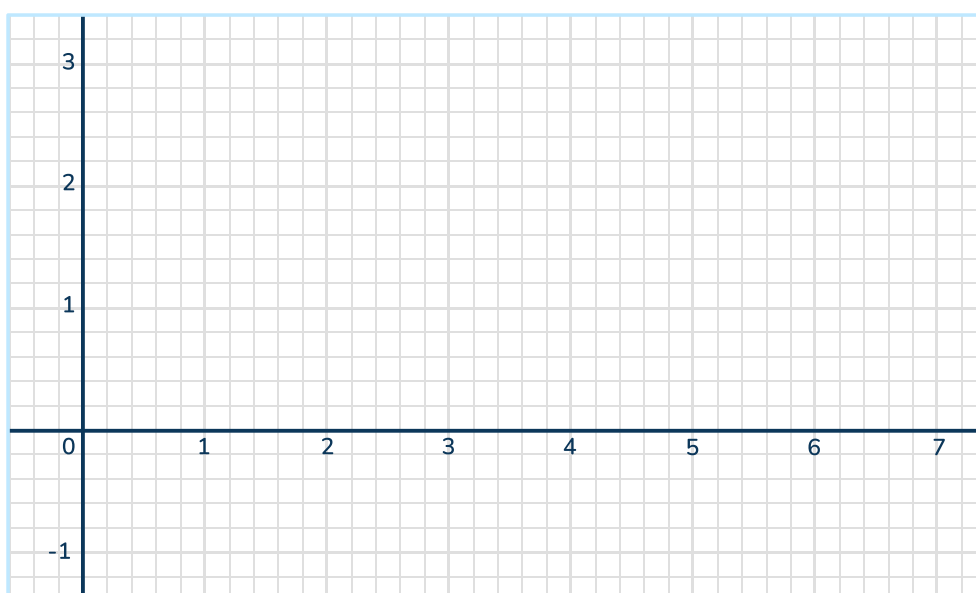
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6 Solve the system by graphing: $2x + y = 8$, $y = -x + 2$.



Answer

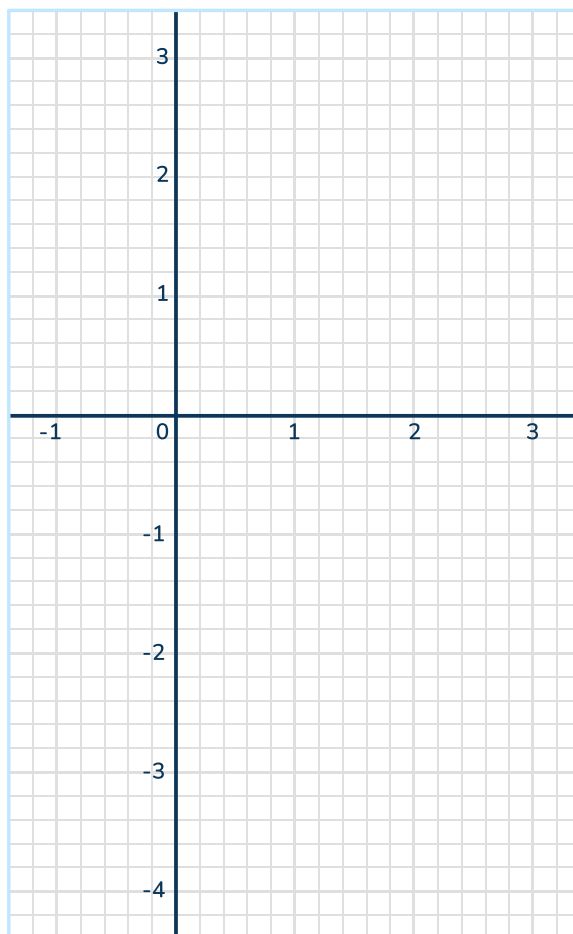
7 Solve the system by graphing: $3x - y = 9$, $y = -x + 6$.



Answer

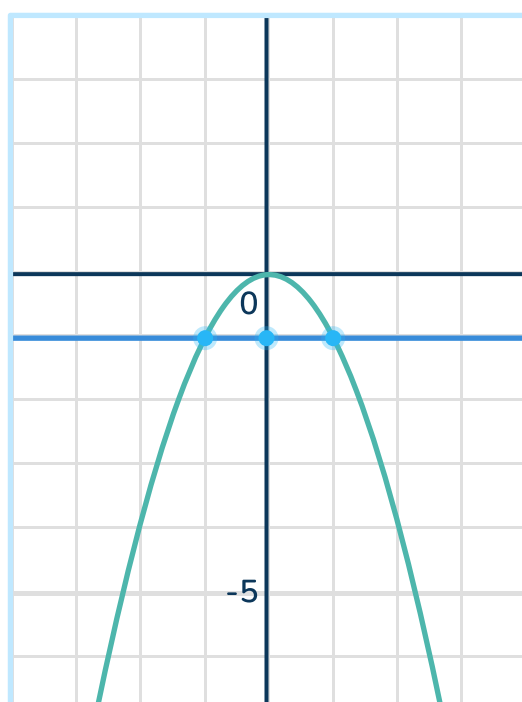
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8 Solve the system by graphing: $y = 2x - 4$, $y = 2x + 2$.



Answer

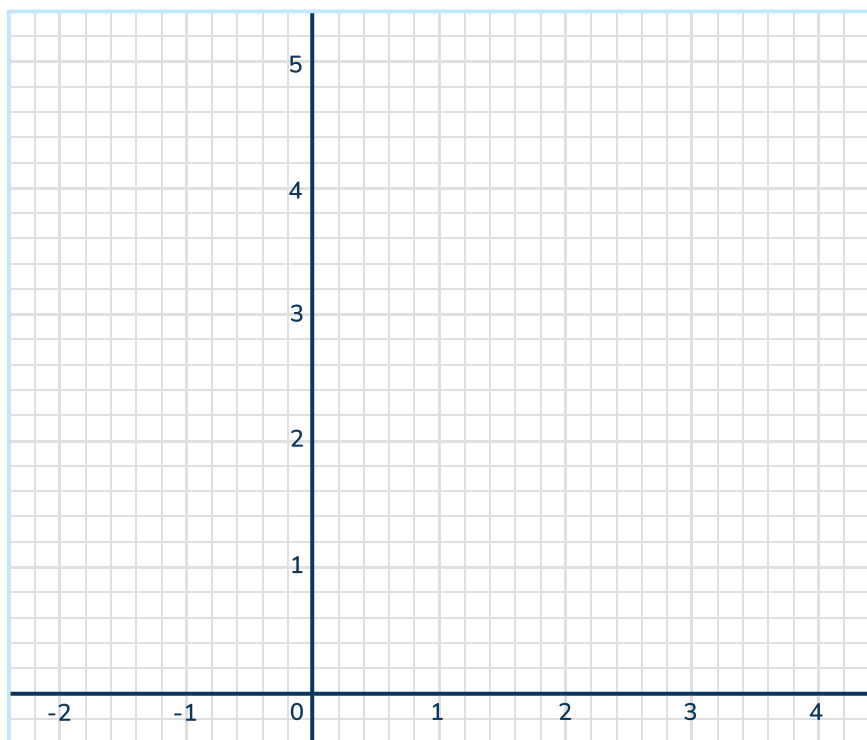
9 Determine the solution to the nonlinear system of equations graphed below.



Answer

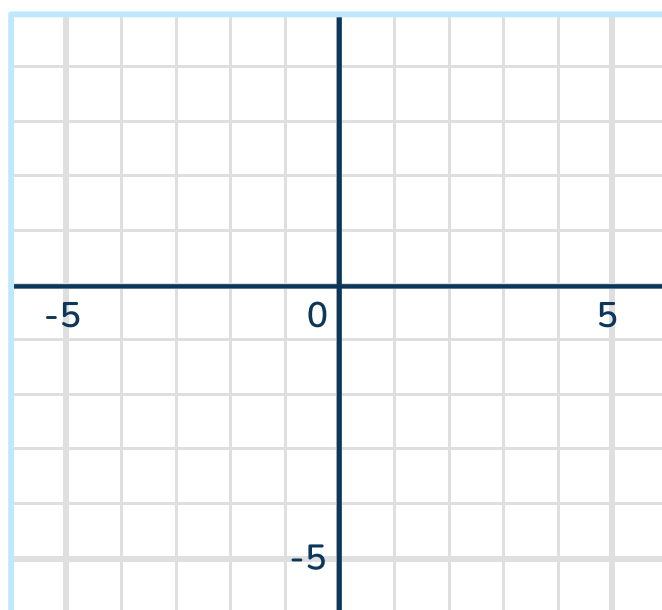
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10 Solve the system by graphing: $y = x + 4$, $y = -x + 4$.



Answer

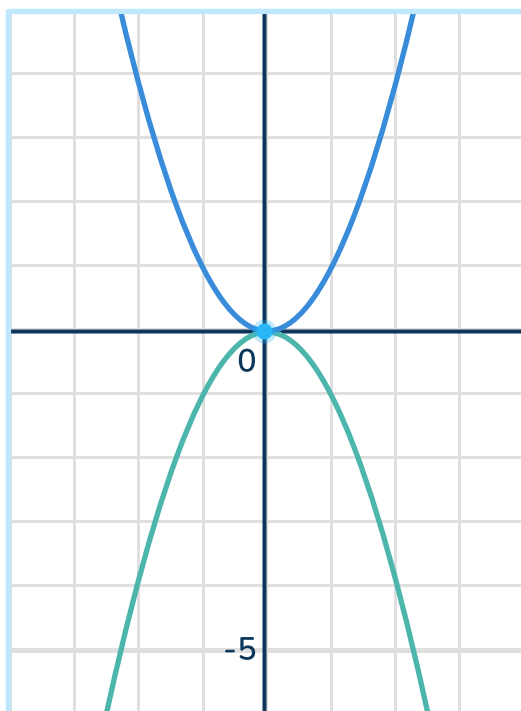
11 Solve the nonlinear system by graphing: $y = x^2$, $y = -3$.



Answer

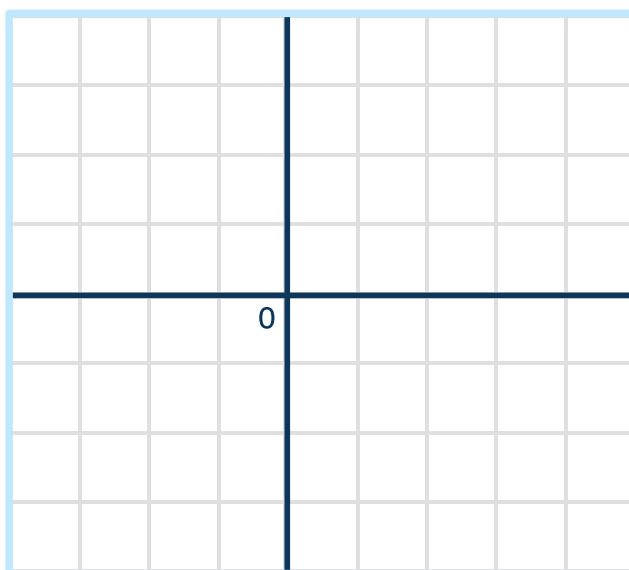
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- 12 Determine the solution(s) to the nonlinear system of equations sketched below.



Answer

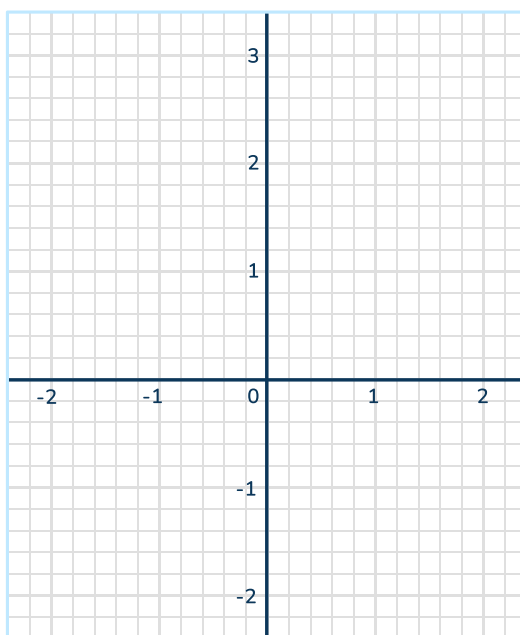
- 13 Solve the nonlinear system by graphing: $x^2 + y^2 = 9$, $x = 3$



Answer

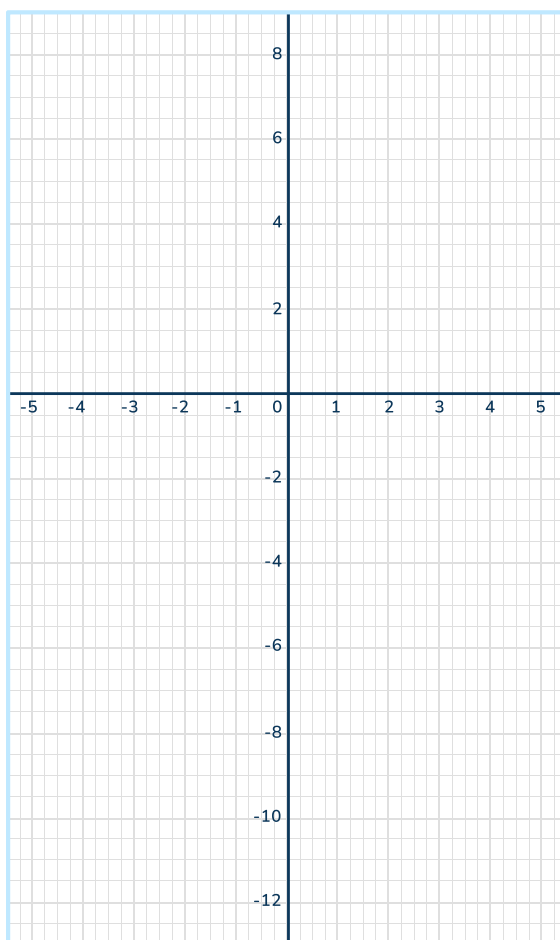
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- 14 Solve the nonlinear system by graphing: $y = x^3$, $y = x$.



Answer

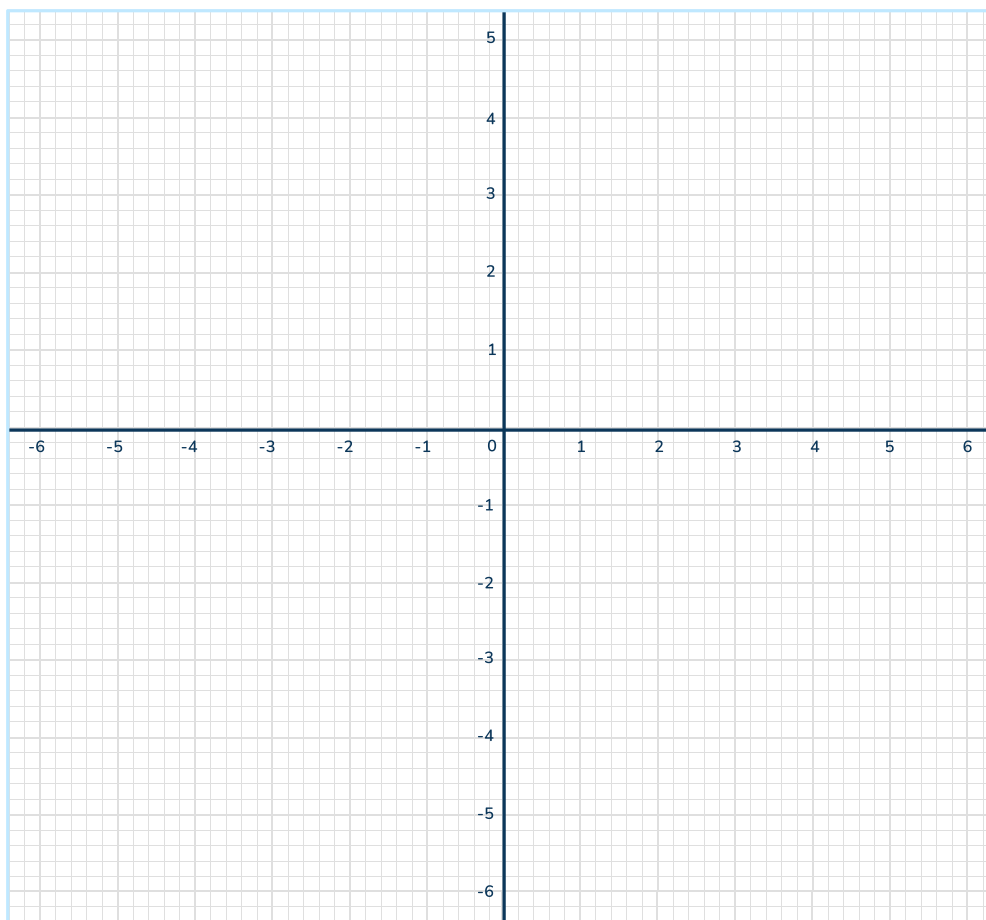
- 15 Solve the nonlinear system by graphing: $y = -x^2 + 6$, $y = 2x - 2$.



Answer

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16 Solve the nonlinear system by graphing: $x^2 + y^2 = 25$, $y = x - 3$.



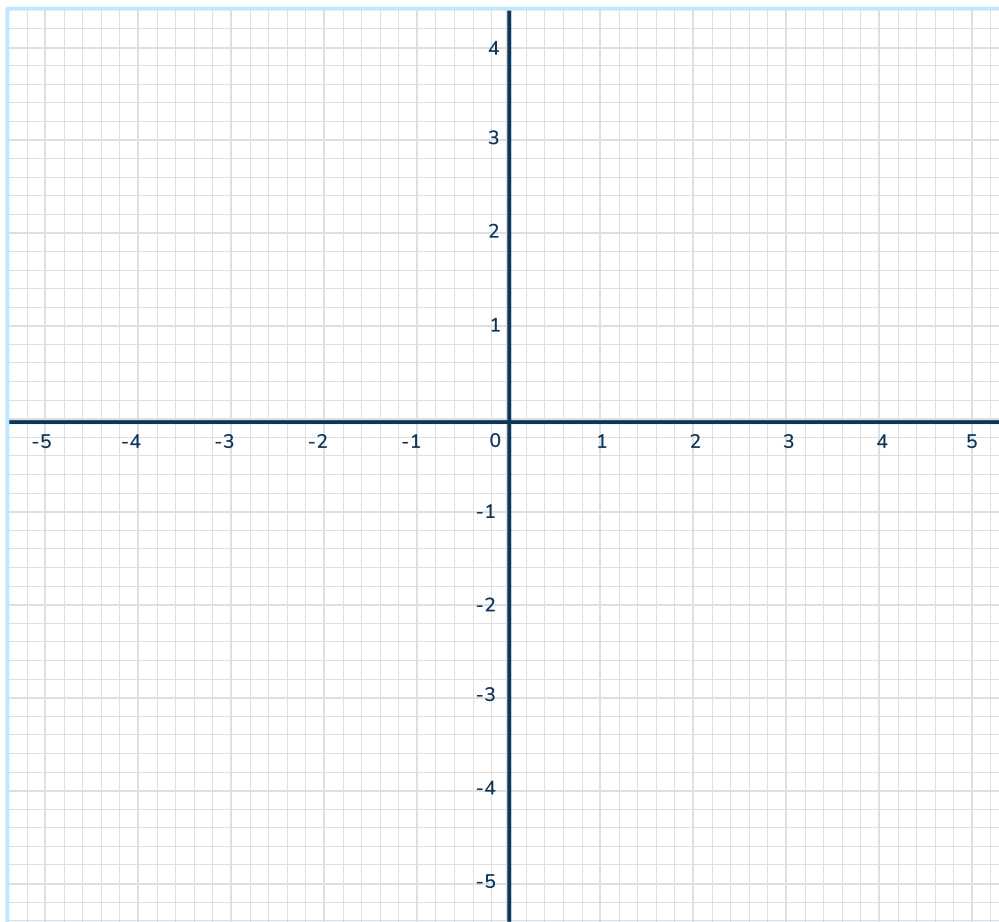
Answer

17 Create a non linear system of equations that has no solution.

Answer

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18 Solve the nonlinear system by graphing: $x^2 + y^2 = 16$, $x = 3$.



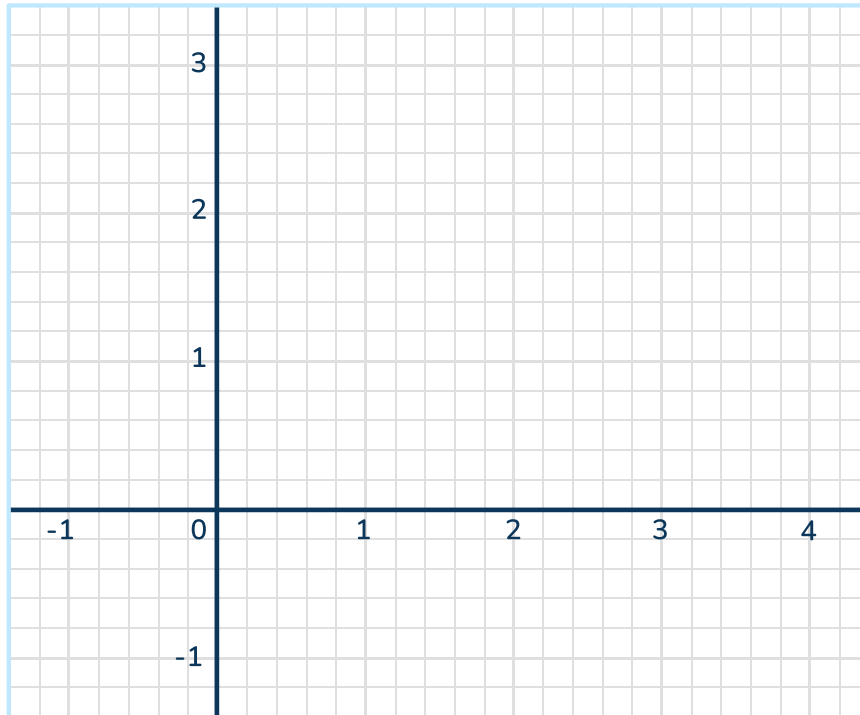
Answer

19 Create a nonlinear system of equations that has exactly one solution.

Answer

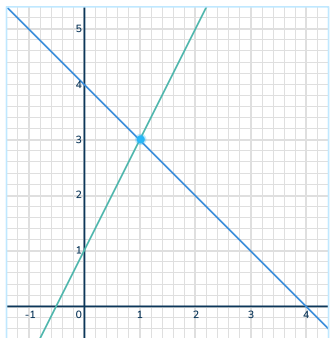
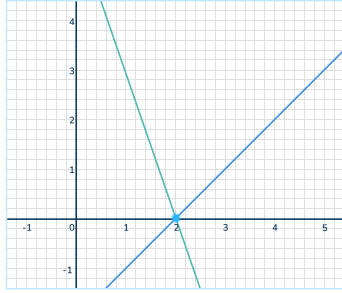
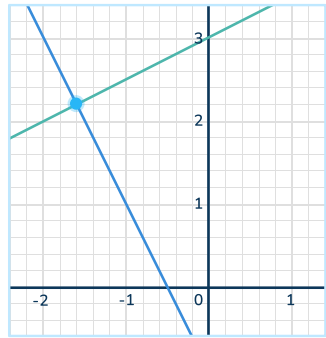
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20 Solve the nonlinear system by graphing: $y = x^2 - 4x + 4$, $y = -x + 2$.

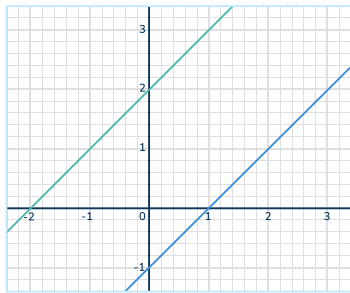
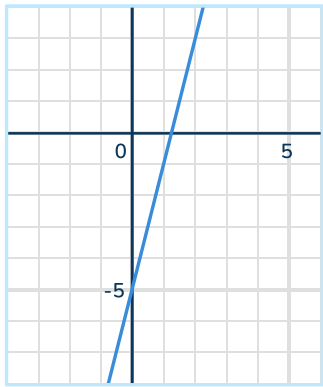
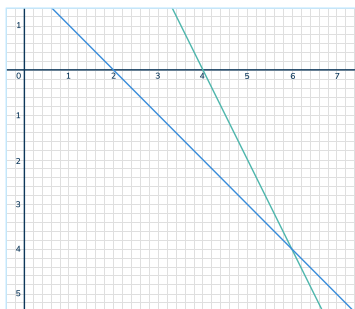


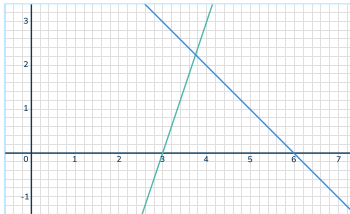
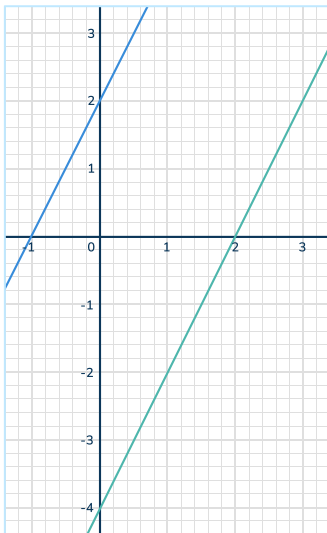
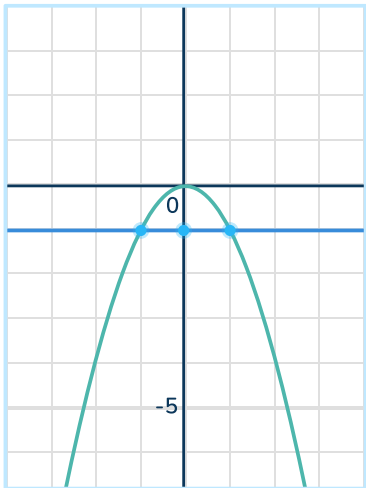
Answer

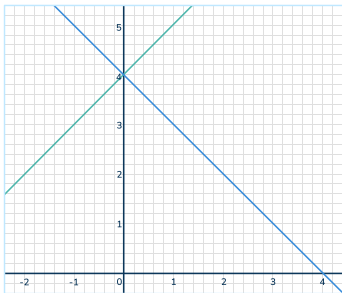
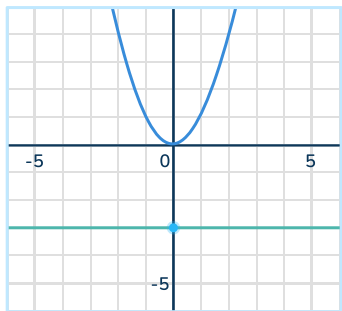
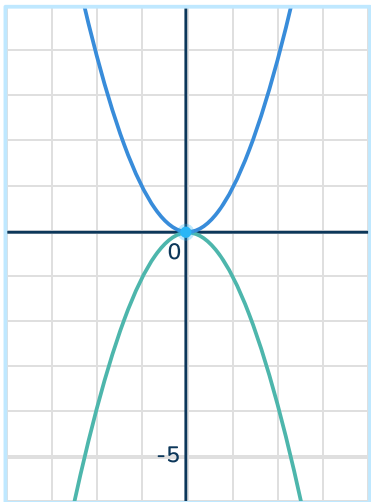
Answers

Question number	Question	Answers	Standard
1	Solve the system by graphing: $y = 2x + 1, y = -x + 4$.	Solution: (1,3) 	HSA-REI.C.3
2	Solve the system by graphing: $y = -3x + 6, y = x - 2$.	Solution: (2,0) 	HSA-REI.C.2
3	Solve the system by graphing: $y = 0.5x + 3, y = -2x - 1$.	Solution: $(-\frac{8}{5}, \frac{11}{5})$ 	HSA-REI.C.1

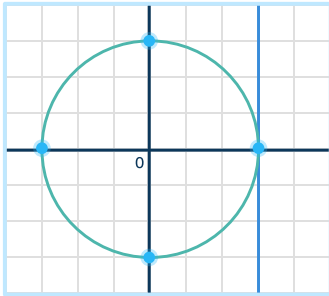
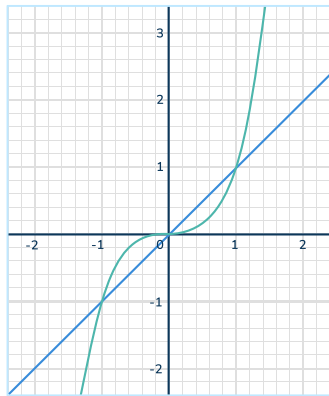
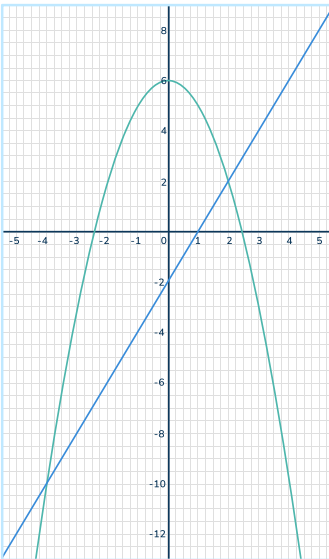
Solving systems of equations by graphing Worksheet | Grades 9 to 12 | Answers

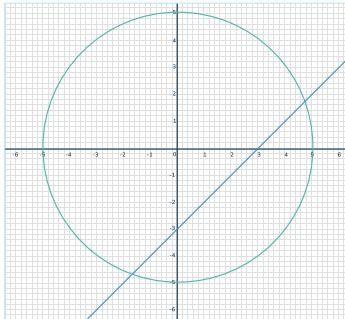
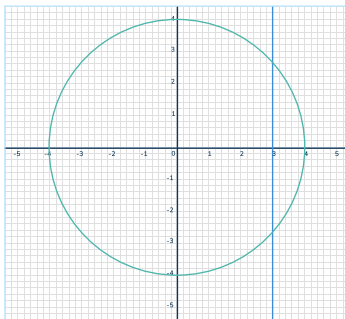
Question number	Question	Answers	Standard
4	Solve the system by graphing: $y = x + 2, y = x - 1$	Solution: No solution (parallel lines) 	HSA-REI.C.0
5	Solve the system by graphing: $y - 4x + 5 = 0, 2y + 10 = 8x$.	Solution: Infinite solutions Lines coincide 	HSA-REI.C.1
6	Solve the system by graphing: $2x + y = 8, y = -x + 2$.	Solution: (6, -4) 	HSA-REI.C.2

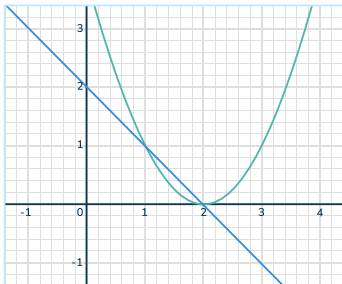
Question number	Question	Answers	Standard
7	Solve the system by graphing: $3x - y = 9, y = -x + 6$.	Solution: $(\frac{15}{4}, \frac{9}{4})$ 	8.EE.C.8a
8	Solve the system by graphing: $y = 2x - 4, y = 2x + 2$.	Solution: No solution (parallel lines) 	8.EE.C.8a
9	Determine the solution to the nonlinear system of equations graphed below. 	Solutions: $(1, -1)$ and $(-1, -1)$	8.EE.C.8a

Question number	Question	Answers	Standard
10	Solve the system by graphing: $y = x + 4$, $y = -x + 4$.	Solution: (0,4) 	HSA-REI.C.6
11	Solve the nonlinear system by graphing: $y = x^2$, $y = -3$.	Solution: No solution 	HSA-REI.C.7
12	Determine the solution(s) to the nonlinear system of equations sketched below. 	Solution: (0, 0)	HSA-REI.C.8

Solving systems of equations by graphing Worksheet | Grades 9 to 12 | Answers

Question number	Question	Answers	Standard
13	Solve the nonlinear system by graphing: $x^2 + y^2 = 9, x = 3$	Solution: (3, 0) 	HSA-REI.C.9
14	Solve the nonlinear system by graphing: $y = x^3, y = x$.	Solution: (0,0),(1,1), (-1,-1) 	HSA-REI.C.10
15	Solve the nonlinear system by graphing: $y = -x^2 + 6, y = 2x - 2$.	Solution: (-4,-10),(2,2) 	HSA-REI.C.11

Question number	Question	Answers	Standard
16	Solve the nonlinear system by graphing: $x^2 + y^2 = 25$, $y = x - 3$.	Solution: Approximately (4,1), (-2,-5) 	HSA-REI.C.12
17	Create a non linear system of equations that has no solution.	Solution: Answers vary: $y = x^2 + 4$ $y = -x^2$ (no point(s) of inter	HSA-REI.C.13
18	Solve the nonlinear system by graphing: $x^2 + y^2 = 16$, $x = 3$.	Solution: $(3, \pm\sqrt{7})$ 	HSA-REI.C.14
19	Create a nonlinear system of equations that has exactly one solution.	Answers vary: $y = -x^2 - 5$ $y = -5$	HSA-REI.C.14




Question number	Question	Answers	Standard
20	Solve the nonlinear system by graphing: $y = x^2 - 4x + 4, y = -x + 2$.	Solution: (2,0),(1,1) 	HSA-REI.C.16

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