

In class practice: solving systems algebraically using substitution and elimination

For numbers 1-6, solve by substitution.

1. $y = 2x - 6$ $3x + 2y = 2$	2. $y = 3x - 2$ $y = 3x + 22$	3. $y = -2x - 5$ $3x - y = 9$
4. $y = 6x + 2$ $3x - \frac{1}{2}y = 1$	5. $y = x^2$ $y = 2x + 3$	6. $x^2 + y^2 = 20$ $x + y = 2$

For #'s 7-15, solve by elimination

7. $x - 2y = -6$ $3x + 2y = 2$	8. $x + 2y = -2$ $5x + 2y = +22$	9. $-3x + y = -5$ $3x - y = 9$
10. $2x + y = 2$ $3x - \frac{1}{2}y = 1$	11. $x + 2y = 3$ $2x + 4y = 6$	12. $2x + 3y = -3$ $3x + 5y = 5$
13. $2x^2 + y^2 = 6$ $x^2 + y^2 = 2$	14. $2x + 4y = 7$ $7x + 5y = -4$	15. $-3x + 3y = -1$ $4x + 5y = 5$

Put each in standard form. Determine the center and the radius.

16. $x^2 + y^2 - 4x = 32$	17. $x^2 + y^2 - 8x + 6y - 3 = -2$	18. $2x^2 + 2y^2 - 8x + 12y + 5 =$
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