

Practice 10-5 HOMEWORK # 32

Completing the Square

Find the value of n such that each expression is a perfect square trinomial.

1. ~~$x^2 - 14x + n$~~

2. $x^2 - \frac{2}{9}x + n$

3. ~~$x^2 - \frac{4}{9}x + n$~~

4. $x^2 - \frac{2}{6}x + n$

Solve each equation by completing the square. If necessary, round to the nearest hundredth.

5. ~~$x^2 - 4x = 5$~~

6. $x^2 - x - 2 = 0$

7. ~~$x^2 - 6x = 10$~~

8. $x^2 + 4x + 4 = 0$

9. ~~$x^2 - 3x = 18$~~

10. $x^2 - 8x - 4 = 0$

11. ~~$x^2 - 6x = 0$~~

12. $x^2 - 6x = 8$

13. ~~$x^2 - 7x = 0$~~

14. $x^2 + 4x - 12 = 0$

15. ~~$x^2 + 11x + 10 = 0$~~

16. $x^2 + 2x = 15$

17. ~~$x^2 - 8x = 9$~~

~~18.~~ $x^2 + 5x = -6$

19. ~~$x^2 - 2x = 120$~~

20. $x^2 - 22x = -105$

21. ~~$2x^2 = 3x + 9$~~

22. $2x^2 + 8x - 10 = 0$

23. ~~$2x^2 - 3x - 2 = 0$~~

24. $2x^2 + 12x - 32 = 0$

25. ~~$3x^2 + 17x - 6 = 0$~~

~~26.~~ $2x^2 - x - 28 = 0$

27. ~~$3x^2 - 4x + 1 = 0$~~

28. $2x^2 - 5x - 3 = 0$

29. ~~$6x^2 - 2x = 28$~~

30. $2x^2 - 16x = -30$

31. ~~$4x^2 = -2x + 12$~~

32. $9x^2 + 6x = 3$

33. ~~$10x^2 + 3x = 4$~~

~~34.~~ $12x^2 - 29x + 15 = 0$

* complete even problems
 * work MUST be on a separate sheet; stapled.
 * skip: 18, 26, & 34.

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