

Classwork Miscellaneous Equations

Please work all problems on a separate sheet of paper.

In problems 1 - 13, find the solutions of the equations.

1. $-3x^3 - 21x^2 - 30x = 0$

2. $2x^3 + 3x^2 - 2x - 3 = 0$

3. $x^4 + 3x^3 - x - 3 = 0$

4. $2x^4 - x^3 + 16x - 8 = 0$

5. $\sqrt[3]{2x-3} = -2$

6. $\sqrt{3x+1} + 4 = 0$

7. $\sqrt{x-3} + x = 5$

8. $(x-7)^{\frac{2}{3}} = 4$

9. $2(x-1)^{\frac{2}{5}} = 8$

10. $(3x+1)^{\frac{3}{4}} = 27$

11. $x^4 - 5x^2 + 4 = 0$

12. $x^6 - 2x^3 - 3 = 0$

13. $x^{\frac{1}{2}} - 2x^{\frac{1}{4}} + 1 = 0$