

The Weekly Rigor

No. 306

“A mathematician is a machine for turning coffee into theorems.”

May 2, 2020

20 Problems in Multiplying a Polynomial by a Polynomial (Part 1)

PROBLEMS

Find each indicated product.

1. $(a + b)(c + d)$.

2. $(a - b)(c - d)$.

3. $(a + b)(a + b)$.

4. $(a - b)(a - b)$.

5. $(a + b)(a - b)$.

6. $(a + b)(a + b)(a + b)$.

7. $(a - b)(a - b)(a - b)$.

8. $(a + b)(a^2 - 2ab + b^2)$.

9. $(a - b)(a^2 + 2ab + b^2)$.

10. $(a + b + c)(a + b + c)$.

“Only he who never plays, never loses.”