

The Weekly Rigor

No. 303

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

April 11, 2020

10 Problems in Raising Monomials to Powers

PROBLEMS

Raise each monomial to the indicated power.

1. $(3ab^2)^2$.

2. $(5a^3c^2)^2$.

3. $(-6a^2x^3)^2$.

4. $(4a^2b)^3$.

5. $(3a^3x)^3$.

6. $(-4a^2c^3)^3$.

7. $(3a^2b^3)^4$.

8. $(-2a^m c^n)^4$.

9. $(4x^2y^3)^3$.

10. $(-3xy^4)^3$.

ANSWERS

1. $9a^2b^4$	2. $25a^6c^4$
3. $36a^4x^6$	4. $64a^6b^3$
5. $27a^9x^3$	6. $-64a^6c^9$
7. $81a^8b^{12}$	8. $16a^{4m}c^{4n}$
9. $64x^6y^9$	10. $-27x^3y^{12}$

“Only he who never plays, never loses.”