

Name: _____ Date: _____

EXPRESSIONS AND EQUATIONS – Numerical Expressions With Exponents

CCSS Math Content 6.EE.A.1: Write and evaluate numerical expressions involving whole-number exponents.

SHARPEN YOUR SKILLS:

Evaluate.

1. 4^3

4. $5^4 - 10^2$

2. $6^2 + 3$

5. $45 - (8^3 \div 4^2)$

3. $(2 + 7)^2$

6. $(2^5 - 3^3)^4 + 23$

APPLY YOUR SKILLS:

Mrs. Booth asks her students to evaluate the expression $(8 - 3)^3 - 2^5 + 4^3$. The work of two students is shown below. Which student evaluated the expression correctly? Identify and explain the mistake(s) the other student made.

Student #1

$$\begin{aligned} (8 - 3)^3 - 2^5 + 4^3 &= 5^3 - 2^5 + 4^3 \\ &= 125 - 32 + 64 \\ &= 93 + 64 \\ &= 157 \end{aligned}$$

Student #2

$$\begin{aligned} (8 - 3)^3 - 2^5 + 4^3 &= 5^3 - 2^5 + 4^3 \\ &= 125 - 32 + 64 \\ &= 125 - 96 \\ &= 29 \end{aligned}$$

