

Name _____



Exponent Trouble

Directions: Each student solved an exponent problem, but each solution has one mistake. Find the error, explain why it is incorrect, and write the correct solution.

1. Student's work: $2^3 \times 2^4 = 2^7$

Error:

Why:

Correct:

2. Student's work: $5^6 \div 5^2 = 5^8$

Error:

Why:

Correct:

3. Student's work: $(3^2)^4 = 3^6$

Error:

Why:

Correct:

4. Student's work: $(4 \times 6)^2 = 4^2$

$\times 6$

Error:

Why:

Correct:

5. Student's work: $(18 \div 3)^2 = 18^2 \div 3$

Error:

Why:

Correct:

6. Student's work: $7^2 \times 8^2 = 56^4$

Error:

Why:

Correct: