

Statement Check Answer Key

1. True
2. False. Correct: $9^8 \div 9^2 = 9^6$
3. True
4. True
5. True
6. False. Correct: $4^5 \times 5^5 = (4 \times 5)^5 = 20^5$
7. False. Correct: $(10^3)^2 = 10^6$
8. True
9. True
10. True

Teacher's Guide

- Review the Product of Powers, Quotient of Powers, Power of a Power, Power of a Product, and Power of a Quotient laws before beginning.
- Encourage students to identify which exponent law applies before deciding whether a statement is true or false.
- For students needing additional support, allow them to write the matching exponent law beside each problem before evaluating it.
- Increase engagement by having students hold up "True" or "False" cards before discussing each statement as a class.
- Pair students to compare and justify their corrections using mathematical vocabulary.
- Extend the activity by asking students to write two true exponent statements and two false ones for a partner to analyze and correct.