Name: _____

Evaluating Expressions with Integer Exponents

Use the exponent rules, then evaluate. Write fractions in simplest form.

1. $2^{-1} \cdot 2^{-2} =$ _____
2. $3^{-3} \cdot 3^{1} =$ _____
3. $5^{4} \cdot 5^{0} =$ _____
4. $5^{-3} \cdot 5^{0} =$ _____
5. $5^{-1} \cdot 5^{-1} =$ _____
6. $3^{0} \cdot 3^{3} =$ _____
7. $3^{-1} \cdot 3^{2} =$ _____
8. $10^{0} \cdot 10^{-1} =$ _____
9. $5^{-2} \cdot 5^{-2} =$ _____
10. $2^{-4} \cdot 2^{3} =$ _____
11. $2^{0} \cdot 2^{1} =$ _____
12. $2^{-2} \cdot 2^{3} =$ _____
13. $2^{-3} \cdot 2^{-1} =$ _____
14. $3^{5} \cdot 3^{-4} =$ _____
15. $3^{1} \cdot 3^{2} =$ _____
16. $10^{5} \cdot 10^{-3} =$ _____
17. $10^{-1} \cdot 10^{3} =$ _____
18. $5^{-4} \cdot 5^{3} =$ _____
19. $3^{4} \cdot 3^{-3} =$ _____
20. $10^{2} \cdot 10^{2} =$ _____

Name: **ANSWER KEY**

Evaluating Expressions with Integer Exponents

Use the exponent rules, then evaluate. Write fractions in simplest form.

1. $2^{-1} \cdot 2^{-2} =$ $\frac{1}{8}$
2. $3^{-3} \cdot 3^{1} =$ $\frac{1}{9}$
3. $5^{4} \cdot 5^{0} =$ 625
4. $5^{-3} \cdot 5^{0} =$ $\frac{1}{125}$
5. $5^{-1} \cdot 5^{-1} =$ $\frac{1}{25}$
6. $3^{0} \cdot 3^{3} =$ 27
7. $3^{-1} \cdot 3^{2} =$ 3
8. $10^{0} \cdot 10^{-1} =$ $\frac{1}{10}$
9. $5^{-2} \cdot 5^{-2} =$ $\frac{1}{625}$
10. $2^{-4} \cdot 2^{3} =$ $\frac{1}{2}$
11. $2^{0} \cdot 2^{1} =$ 2
12. $2^{-2} \cdot 2^{3} =$ 2
13. $2^{-3} \cdot 2^{-1} =$ $\frac{1}{16}$
14. $3^{5} \cdot 3^{-4} =$ 3
15. $3^{1} \cdot 3^{2} =$ 27
16. $10^{5} \cdot 10^{-3} =$ 100
17. $10^{-1} \cdot 10^{3} =$ 100
18. $5^{-4} \cdot 5^{3} =$ $\frac{1}{5}$
19. $3^{4} \cdot 3^{-3} =$ 3
20. $10^{2} \cdot 10^{2} =$ 10000