Name: _____

Power Rule Zero and Negative Exponents

Simplify each expression.

1. $(x^6)^5 =$ _____
2. $(x^2)^2 =$ _____
3. $x^0 =$ _____
4. $1{,}000^0 =$ _____
5. $(y^3)^2 =$ _____
6. $7^0 =$ _____
7. $(10^2)^4 =$ _____
8. $(y^6)^5 =$ _____
9. $(2^4)^2 =$ _____
10. $10^{-1} =$ _____
11. $4^{-2} =$ _____
12. $(a^5)^5 =$ _____
13. $(-4)^0 =$ _____
14. $2^{-2} =$ _____
15. $(10^5)^3 =$ _____
16. $15^0 =$ _____
17. $4^{-1} =$ _____
18. $5^{-2} =$ _____
19. $(3^6)^3 =$ _____
20. $3^{-1} =$ _____

Name: **ANSWER KEY**

Power Rule Zero and Negative Exponents

Simplify each expression.

1. $(x^6)^5 =$ x^{30}
2. $(x^2)^2 =$ x^4
3. $x^0 =$ 1
4. $1{,}000^0 =$ 1
5. $(y^3)^2 =$ y^6
6. $7^0 =$ 1
7. $(10^2)^4 =$ 10^8
8. $(y^6)^5 =$ y^{30}
9. $(2^4)^2 =$ 2^8
10. $10^{-1} =$ $\frac{1}{10}$
11. $4^{-2} =$ $\frac{1}{16}$
12. $(a^5)^5 =$ a^{25}
13. $(-4)^0 =$ 1
14. $2^{-2} =$ $\frac{1}{4}$
15. $(10^5)^3 =$ 10^{15}
16. $15^0 =$ 1
17. $4^{-1} =$ $\frac{1}{4}$
18. $5^{-2} =$ $\frac{1}{25}$
19. $(3^6)^3 =$ 3^{18}
20. $3^{-1} =$ $\frac{1}{3}$