

American Math 6th Grade HW 15; Exponents and Prime Factorization

Write each expression in exponential form and find its value.

1. $2 \times 2 \times 2 \times 2$

2. $0.5 \times 0.5 \times 0.5$

3. $\frac{3}{5} \times \frac{3}{5}$

Find each value.

4. $(1.2)^3$

5. $\left(\frac{1}{4}\right)^4$

6. $(2)^6$

Compare using $>$, $<$, or $=$.

7. $\left(\frac{1}{3}\right)^4$ _____ $\left(\frac{1}{3}\right)^0$

8. $(1)^5$ _____ 1^5

9. 5^0 _____ -5^0

Write the prime factorizations.

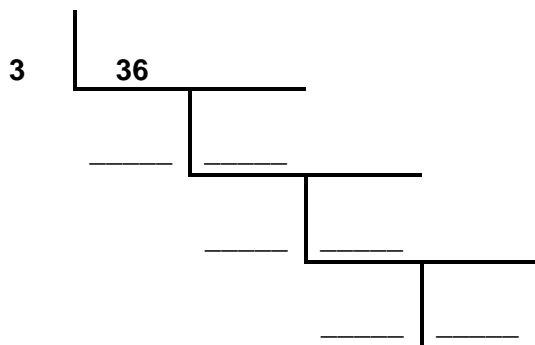
10. 44

11. 125

12. 39

Fill in the missing information. Add more “steps” to the ladder diagram and more “branches” to the tree diagram, if needed. Then, write the prime factorization of each number.

13.



14.

