QUESTIONS COVERING EXPONENTS & RADICALS

1. Consider 4^6.
    a. Name the base
    b. Name the exponent
    c. The number is ____ to the ____th _____? (Fill in the blanks)
2. Calculate 3^1, 3^2, 3^3, 3^4, and 3^5
3. Give the values of 2^0, 2^1, 2^2, 2^3, 2^4, & 2^5.
4. Calculate 1^{10}
5. 10^7 is followed by _____ zeros.
6. Write 1,000,000 using exponents and a base of 10.
7. What number is 1 less than 10^3?
8. 72 can be written as the sum or difference of powers.
    a. $9^2 - 3^2 = 72$
    b. $6^2 + 6^2 = 72$
    Write 100 as a sum and a difference of powers.
9. Simplify $\sqrt{25}$
10. Simplify $\sqrt{25}+\sqrt{16}$
11. Simplify $\sqrt{25}-\sqrt{16}$
12. Simplify $\sqrt{25-16}$. Is it the same answer as #11?
13. Do you expect $\sqrt{64+36}=\sqrt{64}+\sqrt{36}$?
14. Approximate the answer to $\sqrt{50}$
15. Simplify $\sqrt{16}\times\sqrt{25}$