

**Quiz Page 8. KS3 and KS4 (Ages 11-17)**

1.  $1 \times 1 \times 2 \times 5 \times 2 \times 5 \times 10 \times 10 \times 0 \times 10 =$

- A. 1000000    B. 0    C. 50    D. 10000    E. 100000

2.  $1^{2009} + 1^{2010} + 1^{2011} + 1^{2012} =$

- A.  $1^{2042}$     B.  $4^{2042}$     C. 4    D.  $2^{2042}$     E. 2042

3.  $(-1)^{99} + (-1)^{98} + (-1)^{97} + \dots + (-1)^3 + (-1)^2 + (-1)^1 =$

- A. 0    B. -99    C. 100    D. 1    E. -1

4. If 10% of  $m$  is  $n$ , then  $m =$

- A.  $n$     B.  $9n$     C.  $10n$     D.  $0.9n$     E.  $0.1n$

5. What is the Units (Ones) digit of the following sum?

$$1^{2012} + 6^{2012} + 5^{2012}$$

- A. 12    B. 1    C. 0    D. 2    E. 5

6. The greatest common factor of  $2^{2010}$ ,  $2^{2011}$  and  $2^{2012}$  is

- A. 2010    B. 1    C. 2    D.  $2^{2012}$     E.  $2^{2010}$

7. What is the Units (Ones) digit of the following product?

$$1^{2012} \times 2^{2012} \times 6^{2012} \times 9^{2012} \times 5^{2012}$$

- A. 1    B. 0    C. 6    D. 5    E. 7

8.  $\sqrt{36^{16}} =$

- A.  $36^8$     B.  $36^4$     C.  $18^4$     D.  $6^8$     E.  $6^4$

9.  $\sqrt{36^{16}} =$

- B.  $36^4$     B.  $6^8$     C.  $18^4$     D.  $18^8$     E.  $6^{16}$

10. The area of a circle is  $4900\pi$ . The circumference is

- A. 140    B.  $70\pi$     C. 70    D.  $140\pi$     E.  $35\pi$

ANSWERS:

1. B
2. C
3. E
4. C
5. D
6. E
7. B
8. A
9. E
10. D

I hope you find this a useful start to the term.