For questions # 1-15, answer each question ODD, EVEN, or CANNOT BE DETERMINED.

1. If **n** is odd, **p** is even, and **q** is odd, what is $\mathbf{n} + \mathbf{p} + \mathbf{q}$?
2. If **r** is a prime number greater than 2, and **s** is odd, what is **rs**?
3. If **t** is odd, what is $\mathbf{t^4}$?
4. If **u** is even and **w** is odd, what is $\mathbf{u} + \mathbf{uw}$?
5. If $\mathbf{x} \div \mathbf{y}$ yields an odd integer, what is **x**?
6. If $\mathbf{a} + \mathbf{b}$ is even, what is **ab**?
7. If **c**, **d**, and **e** are consecutive integers, what is **cde**?
8. If **f** and **g** are prime numbers, what is $\mathbf{f} + \mathbf{g}$?
9. If **h** is even, **j** is odd, and **k** is odd, what is $\mathbf{k}(\mathbf{h} + \mathbf{j})$?
10. If **m** is odd, what is $\mathbf{m^2} + \mathbf{m}$?
11. If **n**, **p**, **q** and **r** are consecutive integers, what is their sum?
12. If $\mathbf{t} = \mathbf{s} - \mathbf{3}$, what is $\mathbf{s} + \mathbf{t}$?
13. If **u** is odd and **w** is even, what is $(\mathbf{uw})^2 + \mathbf{u}$?
14. If **xy** is even and **z** is even, what is $\mathbf{x} + \mathbf{z}$?
15. If **a**, **b**, and **c** are consecutive integers, what is $\mathbf{a} + \mathbf{b} + \mathbf{c}$?
16. If x, y and z are distinct prime numbers and xy is even and xz is even, what is the value of x?
17. If **a** and **b** are both prime numbers greater than 10, which of the following CANNOT be true? Indicate all that apply!
I. **ab** is an even number.
II. The difference between **a** and **b** equals 117.
III. The sum of **a** and **b** is even.
18. Given that there are x unique factors of x and that $x > -10$. What is the value of integer x?
19. If p, q and r are integers, is pq+r even given that p+r is even and q+r is odd?
20. If **a**, **b**, and **c** are integers and $\mathbf{ab} + \mathbf{c}$ is odd, which of the following must be true? Indicate all that apply!
I. $\mathbf{a} + \mathbf{c}$ is odd
II. $\mathbf{b} + \mathbf{c}$ is odd
III. **abc** is even
21. If x and y are integers, and $w = x^2y + x + 3y$, which of the following statements must be true? Indicate all such statements.
a) If w is even, then x must be even.
b) If x is odd, then w must be odd.
c) If y is odd, then w must be odd.
d) If w is odd, then y must be odd.
22. w , x and y are consecutive even integers with wxy = 0 and w < x < y
Column A: x
Column B: 0 CBD
23. If x and y are positive odd integers, then which of the following must also be an odd integer? Indicate all that apply!
a) x^{y+1}
b) $x(y + 1)$
c) $(y + 1)^{x-1} + 1$
24. 202 divided by some prime number **x** yields an odd number. 411 multiplied by some prime number **y** yields an even number
Quantity A: x
Quantity B: y

25. Quantity A: The tenths digit of the product of two even integers divided by 4.
Quantity B: The tenths digit of the product of an even and an odd integer divided by 4.

26. If n is a nonnegative integer, then n(n+1)(n+2) is

A) Even only when n is even
B) Even only when n is odd
C) Odd whenever n is odd
D) Divisible by 3 only when n is odd
E) Divisible by 12 whenever n is even