

**ON YOUR OWN:**

State, whether each pair of sets, given below, is **equal** or **equivalent sets**.

1.  $\{3, 5, 7\}$  and  $\{5, 3, 7\}$

2.  $\{8, 6, 10, 12\}$  and  $\{3, 2, 4, 6\}$

3.  $\{7, 7, 2, 1, 2\}$  and  $\{1, 2, 7, 2, 7\}$

4.  $\{1, 4, 9, 16, 25\}$  and  $\{1^2, 2^2, 3^2, 4^2, 5^2\}$

5.  $\{a, b, c, d\}$  and  $\{\Delta, \circ, \square, \nabla\}$

6. {Natural numbers less than five} and {Letters of the word 'BOAT'}

7.  $\{2, 4, 6, 8, 10\}$  and {even natural numbers less than 12}

8. {Days of the week} and {Letters of the word 'HONESTY'}

9.  $\{1, 3, 5, 7, \dots\}$  and {set of odd natural numbers}

10. {Even natural numbers} and {Odd natural numbers}

**Identify all the empty sets or null sets by ticking the appropriate box(es).**

| SETS                                |  | SETS  |  |
|-------------------------------------|--|---|--|
| {50 <sup>th</sup> day of the month} |  | {ducks that talk}                             |  |
| {colours of the rainbow}            |  | {Ships that brought the mixed race to Guyana} |  |
| {children's favourite foods}        |  | {cows that eat meat}                          |  |
| {quadrilaterals with 5 sides}       |  | {poisonous snakes}                            |  |
| {waterfalls in Guyana}              |  | {humans who are invertebrates}                |  |

## HOMWORK

**Study the following sets carefully.**

1. {counting numbers between 5 and 6}
2. {odd numbers between 7 and 19}
3. {odd numbers between 7 and 9}
4. {even numbers which are not divisible by 2}.
5. {0}
6. { }
7. {Prime numbers between 7 and 11}
8. {Month having more than 31 days}
9. {Prime numbers divisible by 2}
10. {Negative natural numbers}
11. {Women who are 5 meter tall}
12. {Men with four legs}
13. {Integers less than 5}
14. {A week having 10 days}
15. {Prime numbers between 17 and 23}
16. {Set of even numbers, not divisible by 2}
17. {Set of multiples of 3, which are more than 9 and less than 15}

**From the sets above:**

- (a) Make a list of all the empty sets
- (b) Identify at least three pairs of equivalent sets.
- (c) List at least two pairs of equal sets.