## Sets

## Exercises:

1. Give a defining property for each of the following sets:
a) $\{C, D, E, F, A, G, B\}$
b) $\{$ England, Australia, USA, Scotland \}
c) $\{1,2,3,4,6,12\}$
d) $\{4,8,12,16,20$, etc $\}$
2. Which of the following are null sets:
a) $\{$ Primes divisible by 7 \}
b) \{ Asian countries that have won the world cup in soccer\}
c) $\{$ Whole numbers $x$, where $17<x<18\}$
d) $\{0\}$
3. Which of the following sets are finite or infinite:
a) $\{a, b, c, d, e, \ldots \ldots . . . . . x, y, z\}$
b) $\{2,4,6,8,10,12 \ldots .$.
c) $\{$ factors of 12$\}$
d) $\{$ multiples of 12$\}$
e) $\{$ triangles \}
f) $\{$ Prime numbers \}
4. In the following set of objects, sort out the odd element :
a) \{boat, car, aeroplane, petrol, bus \}
b) $\{$ Deer, chicken, cow, pig, sheep \}
c) \{ quadrilateral, square, pentagon, rectangle, paralelogram \}

## Sets

## Answers

## Exercises:

1. Give a defining property for each of the following sets:
a) First seven letters of the English alphabet
b) English speaking countries
c) Factors of 12
d) Multiples of 4
2. Which of the following are null sets:
$a, b, c$
3. Which of the following sets are finite or infinite:

Finite sets: a,c Infinite sets: b,d,e,f,
4. In the following set of objects, sort out the odd element :
a) \{boat, car, aeroplane, petrol, bus \}
b) $\{$ Deer, chicken, cow, pig, sheep \}
c) \{ quadrilateral, square, pentagon, rectangle, paralelogram \}

