

Set

Instruction : answer the following questions

1. Sort and classify all objects below according to the suitable group

Watermelon	Bus	Pen	Lorry	Motorcycle
Pencil	Green	Pineapple	Papaya	Compasses
Bicycle	Apple	Yellow	Car	Blue
Red	Ruler	Paper	Black	Starfruit

Set C (colour)	Set D (stationary)
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2. Choose one of correct method by tick at the box. Then fill in the blank with right word
(type 0 for blank which is not related)

	C	D
Listing method	$C = \{ \quad \quad \quad \}$ C is the set of $C = \{ x : x \text{ is a } \quad \quad \quad \}$	$D = \{ \quad \quad \quad \}$ D is the set of $D = \{ x : x \text{ is a } \quad \quad \quad \}$
Description method	$C = \{ \quad \quad \quad \}$ C is the set of $C = \{ x : x \text{ is a } \quad \quad \quad \}$	$D = \{ \quad \quad \quad \}$ D is the set of $D = \{ x : x \text{ is a } \quad \quad \quad \}$
Set builder notation	$C = \{ \quad \quad \quad \}$ C is the set of $C = \{ x : x \text{ is a } \quad \quad \quad \}$	$D = \{ \quad \quad \quad \}$ D is the set of $D = \{ x : x \text{ is a } \quad \quad \quad \}$

Set Exercise 2

1. Fill in the box with the symbol $\in$ or $\notin$

a) $P = \{\text{letter in word "RAMALAN"}\}$		b) $Q = \{x : x \text{ is multiple of 7 and } x < 50\}$	
i. $R \boxed{} P$	ii. $K \boxed{} P$	i. $14 \boxed{} P$	ii. $35 \boxed{} P$
iii. $N \boxed{} P$	iv. $A \boxed{} P$	iii. $24 \boxed{} P$	iv. $56 \boxed{} P$

2. Determine the $n(A)$ for each of the following sets

a) $A = \{\text{multiples of 3 which are less than 20}\}$ $n(A) =$	b) $A = \{\text{positive integer which less than 5}\}$ $n(A) =$
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3. Fill in the blank for the following:

a) $X = \{K, U, R, A, N, G\}$ $n(X) =$	b) $C = \{x : x \text{ is an odd number } x < 8\}$ $n(C) =$	c) $E = \{\text{the first four prime number}\}$ $n(E) =$
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4. Determine the following is TRUE or FALSE

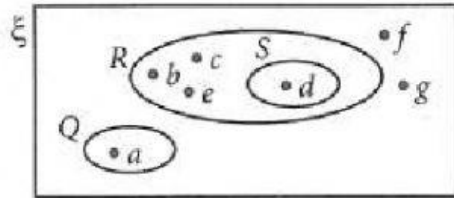
a) $Q = \{b, a, g, u, s\}$ $R = \{u, b, a, n\}$ $Q \subset R$ $R \subset Q$	b) $S = \{k, e, l, u, a, r\}$ $T = \{l, a, k, u\}$ $S \not\subset T$ $T \subset S$	c) $T = \{1, 2, 3, 4, 5, 6\}$ $U = \{2, 3, 5\}$ $U \subset T$
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5. Fill in the blank

a) $P = \{d, r, i, v, e, r\}$ $Q = \{a, i\}$ $Q' = \{ \}$	b) $T = \{2, 4, 6, 8, 10, 12, 14, 16\}$ $U = \{4, 8, 12\}$ $U' = \{ \}$	c) $M = \{\text{colour of rainbow}\}$ $N = \{\text{red, green, blue, yellow, white}\}$ $N' = \{ \}$
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6.

Diberi ξ ialah set semesta, senaraikan unsur bagi set Q' , R' dan S' . / Given ξ is a universal set, list the elements of Q' , R' and S' .



a) Fill in the boxes with the correct answer

i) $n(\xi) =$

ii) $n(Q') =$

a) list all the elements of set R

$R = \{ \quad , \quad , \quad , \quad , \quad \}$

b) state the relationship between set R and set S by choosing the correct symbol

S R

c) state the number of possible subsets of set R