



SET Basic

Mathematics

SET

Understanding of set is like understanding GROUPING.

Set = {element1 , element 2 , element 3 }

Set of even numbers: {..., -4, -2, 0, 2, 4, ...}

Set of odd numbers: {..., -3, -1, 1, 3, ...}

Set of prime numbers: {2, 3, 5, 7, 11, 13, 17, ...}

Set of students in Skor Minda Form 1 Class : {Kabelen , Hugo, Boon Keong}

Positive multiples of 3 that are less than 10: {3, 6, 9}

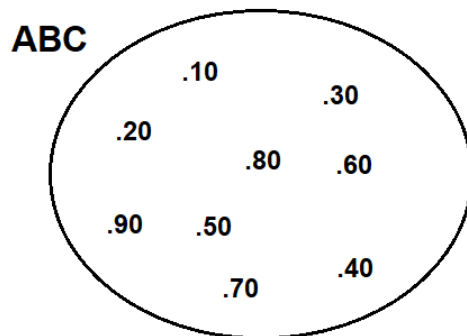
Example:

Set ABC = { x: x is a multiple of 10 less than 100} **Set ABC = { x: x ialah gandaan 10 kurang daripada 100}**

- List all the elements in the Set ABC / **Senaraikan element bagi set ABC**
- Draw a Venn Diagram to represent Set ABC / **Lukis Gambar rajah Venn untuk Set ABC**
- Find $n(ABC)$ **Cari $n(ABC)$**

Answer:

a) $ABC = \{10, 20, 30, 40, 50, 60, 70, 80, 90, 100\}$



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- b) $n(ABC) = 9$
- c) $n(ABC) = 9$



Question:

- a) List down the set A of all even numbers from 100 to 130. Then find $n(A)$ **Senaraikan unsur unsur set A yang mewakili nombor genap dari 100 ke 130. Cari nilai $n(A)$**
- b) List down the set B of all the odd numbers from 130 to 150. Then find $n(B)$ **Senaraikan unsur unsur set A yang mewakili nombor ganjil dari 130 ke 150. Cari nilai $n(B)$**
- c) List down the set C of tossing 1 coin. Then find $n(C)$. **c) Senaraikan set C untuk melambungkan 1 duit syiling. Kemudian cari nilai $n(C)$.**
- d) List down the set D of tossing 2 coins. Then $n(D)$. **Senaraikan set D untuk melambungkan 2 duit syiling . Kemudian $n(D)$**
- e) List down the set E of rolling a dice. Then find $n(E)$ **Senaraikan set E untuk melambungkan sebiji dadu. Kemudian cari $n(E)$**
- f) List down the set F of rolling 2 dices. Then find $n(F)$ **Senaraikan set F untuk 2 biji dadu dilambungkan. Kemudiannya cari $n(F)$**

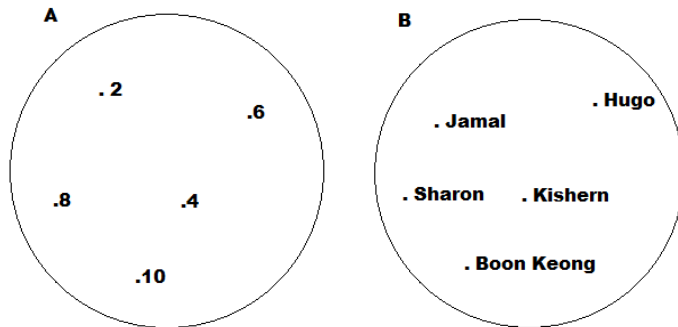
Answer

Venn diagram

Set A = {2, 4, 6, 8, 10}

Set B = {Jamal, Hugo, Kishern, Sharon, Boon Keong}

Draw the Venn diagram for the following information above? **Lukis sebuah gambar rajah Venn untuk mewakili Set A dan Set B**

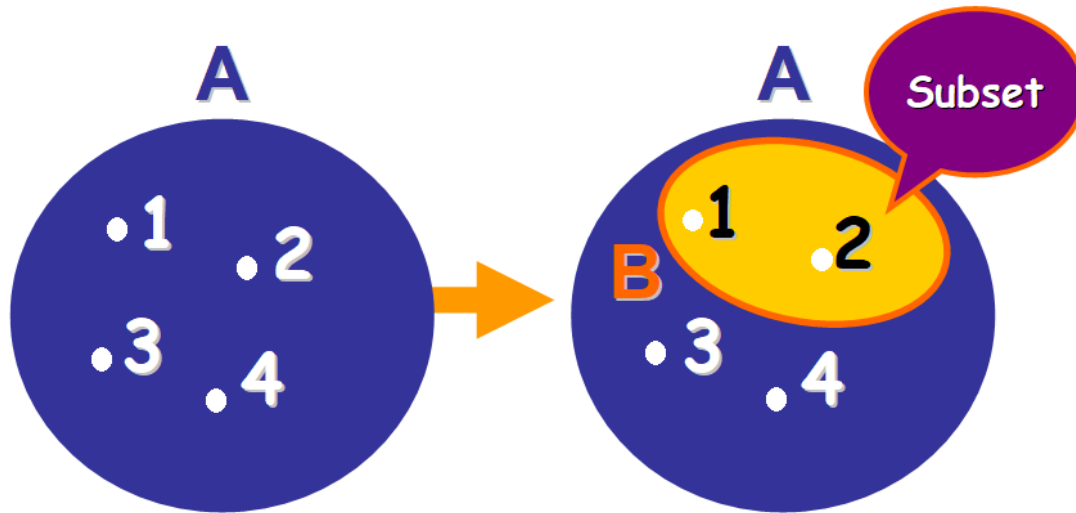


Question:

- Draw the Venn Diagram for the **set A** for all even numbers starting from 100 to 130. **Lukiskan gambar rajah Venn untuk set A bagi nombor genap yang bermula dari 100 hingga 130**
- Draw the Venn Diagram for the **set B** for all the odd numbers starting from 130 to 150. **Lukiskan gambar rajah Venn untuk set B bagi nombor ganjil yang bermula dari 130 hingga 150**
- Draw the Venn Diagram for the **set C** when the tossing 1 coin. **Lukiskan gambar rajah Venn bagi set C bagi satu syilling yang dilambungkan**
- Draw the Venn Diagram for the **set D** when tossing 2 coins. **Lukiskan gambar rajah Venn bagi set C bagi dua syilling yang dilambungkan**
- e)

Answer

Subset



Question 1

Answer

Determine whether the following Set A is the Subset of Set B. Explain your answer

Tentukan sama ada Set A berikut adalah Subset Set B. Bincangkan jawapan anda

$A = \{2,4,6,8,10,12,14\}$

$B = \{1,2,3,4,5,6,7,8,9,10\}$

Question 2

Answer

Determine whether the following Set Group is the Subset of Set Class. Explain your answer

Tentukan sama ada Set Group berikut adalah Subset Set Class. Terangkan jawapan anda

Group = {John, Doe, Maryam, Steve, Agnes}

Class = {John, Agatha, Steve, Justin, Vale, Angie, Josh, Mercy, Melinda}



Drawing Venn Diagram Involving Subset

Question	Answer
<p>Question 1 Draw the Venn Diagram Lukis gambar rajah Venn</p> <p>Group = {John, Steve} Class = {John, Agatha, Steve, Justin, Vale, Angie, Josh, Mercy, Melinda}</p>	
<p>Question 2 Draw the Venn Diagram Lukis gambar rajah Venn</p> <p>In a Cheer Leading Club there are 2 groups of students. Group A and Group B. Represent the information in Venn Diagram</p> <p>Dalam Cheer Leading Club terdapat 2 kumpulan pelajar. Kumpulan A dan Kumpulan B. Wakili maklumat dalam Rajah Venn</p>	
<p>Question 3 World War 2 is divided into two military alliances: Allies and Axis. Use a Venn diagram to draw the two military alliances</p> <p>Allies consists of</p> <ul style="list-style-type: none">a) Franceb) Great Britainc) Soviet <p>Axis consists of</p> <ul style="list-style-type: none">a) Japanb) Italyc) Germany <p>Perang Dunia 2 dibahagikan kepada dua pakatan tentera: Sekutu dan Axis. Gunakan gambarajah Venn untuk menarik dua pakatan tentera</p> <p>Sekutu terdiri daripada</p> <ul style="list-style-type: none">a) Perancisb) Great Britainc) Soviet	

Axis terdiri daripada

- a) Jepun
- b) Itali
- c) Jerman

Question 4

Mammals = {Human, dog, cats, squirrel, whale, dolphins }

Aquatic = {Whale, dolphins}

Mamalia = {Manusia, anjing, kucing, tupai, ikan paus, ikan lumba-lumba}

Akuatik = {ikan Paus, ikan lumba-lumba}

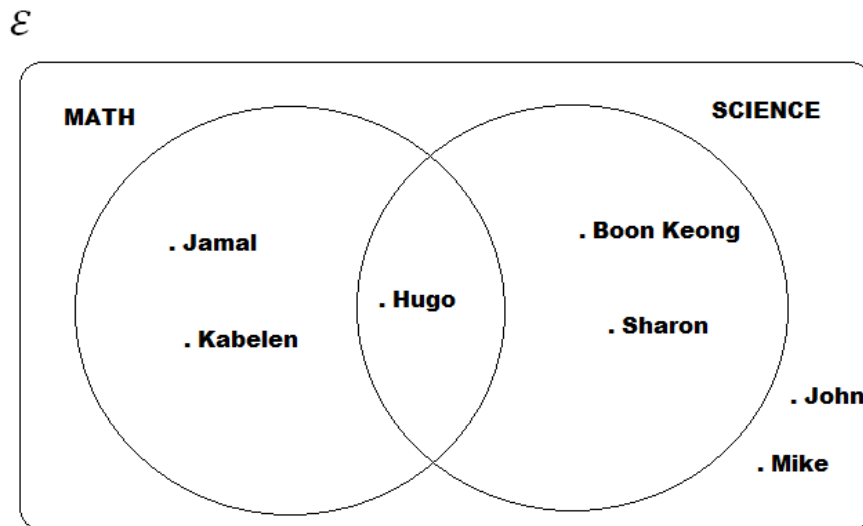
Draw the Venn diagram to represent the Mammals and Aquatic Animals

Lukis rajah Venn untuk mewakili Mamalia dan Haiwan Akuatik



Universal Set

\mathcal{E} , Universal Set



$\mathcal{E} = \{John, Mike, Jamal, Hugo, Kabelen, Boon Keong, Sharon\}$

Question

Draw the Venn Diagram along with the universal SET / Lukis gambar rajah Venn berdasarkan informasi dibawah

$$\mathcal{E} = \{x: 0 < x < 15\}$$

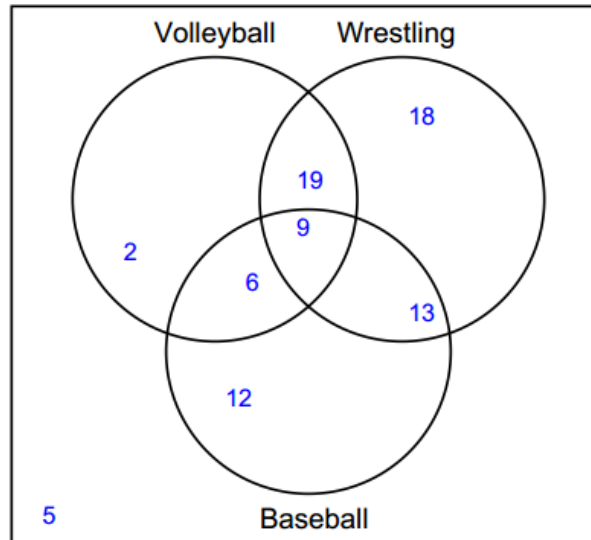
$$A = \{2, 4, 6, 8, 10, 12, 14\}$$

$$B = \{3, 6, 9, 12\}$$



HOTS QUESTIONS

Question 1



- 1) How many students like both Wrestling and Baseball but not Volleyball ? ____
- 2) How many students do not like either Volleyball or Baseball ? ____
- 3) How many students only like Wrestling ? ____
- 4) How many students do not like both Wrestling and Baseball ? ____
- 5) How many students do not like both Volleyball and Baseball ? ____

Question 2

In the classroom there are 40 students. 20 students join the Math club. Given that the number of students participates for both Math and Science clubs are 15 students, find the number of students who only participates in Science clubs

Di dalam kelas terdapat 40 pelajar. 20 pelajar menyertai kelab Matematik. Memandangkan jumlah pelajar yang mengambil bahagian untuk kedua-dua kelab Matematik dan Sains adalah 15 pelajar, berapakah bilangan pelajar yang hanya mengambil bahagian dalam kelab Sains



Question 3

In the stadium there is a total of 4000 spectators. 2000 spectators cheer only for the blue team, 500 spectator cheer for the Blue and Red team. Find the amount of spectators cheer for only Red team?

Di stadium terdapat 4000 penonton. 2000 penonton bersorak hanya untuk pasukan biru, 500 penonton bersorak untuk pasukan Blue dan Red. Cari jumlah penonton yang bersorak untuk pasukan pasukan Red sahaja?