1. Shade each of these:

 $A'$ $B'$ ($A∩B)'$

A

B

A

B

A

B

$ (A∪B)'$ $A'∩B$ U

A

B

A

B

A

B

  

A

B

C

A

B

C

A

B

C

A

B

1. a) Find n(U).

 b) Find n( $A∩B$).

4

 c) Find n( $A∪B$).

8

6

24

12

 d) Find n($A'$).

5

34

10

9

1. P = {2, 3, 4, 5, 7, 11, 13, 17}

Q = {11, 13, 15, 17, 19}

* 1. Draw a Venn diagram to illustrate the above information
	2. Copy and complete the following statements:
		1. $P∩Q=…$ ii. $P∩Q'=…$
1. P is the set of whole numbers less than 30.
	1. List the subset Q of even numbers
	2. List the subset *R* of odd numbers
	3. List the subset *S* of prime numbers
	4. List the subset *T* of square numbers
	5. List the subset *U* of triangular numbers
2. State whether each of the following statements is true or false.
	1. {Algeria, Mozambique}$⊆$ {countries in Africa}
	2. {1, 2, 3, 4 }$ ⊆$ {1, 2, 3, 4}
	3. {1, 2, 3, 4 }$ ⊂$ {1, 2, 3, 4}
	4. {volleyball, basketball }$ ⊈$ {team sports}

**For numbers 6 – 9, draw a Venn Diagram to represent the situation. Then answer the question.**

1. There are two artist guilds in a city: the ABC and the PAA. 300 artists in the city are members of both guilds and 200 are members of neither. There are 1500 total members of the ABC guild and 2000 total members of the PAA. How many artists are in the city?
2. A city has three newspapers A, B and C. Of the adult population, 1% read none of these newspapers, 36% read A, 40% read B, 52% read C, 8% read A and B, 11% read B and C, 13% read A and C and 3% read all three papers. What percentage of the adult population read newspaper A only?
3. In a certain population, 87 people like raspberries, with 9 liking only raspberries. 91 people like strawberries, with 10 liking strawberries only. 91 people like blueberries, with 12 liking blueberries only. If 40 of these people like all three berries, how many people like strawberries andblueberries, but not raspberries?