

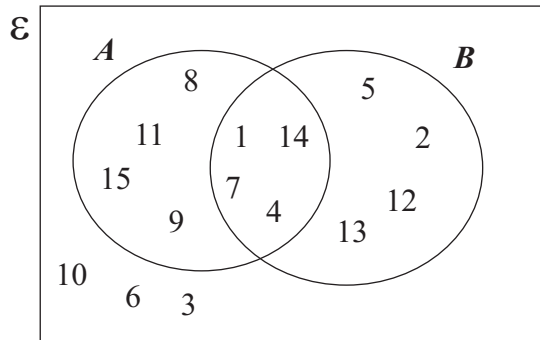
Master Maths 8 Worksheet 69

Venn Diagrams

69

Name: _____

1. List the elements in the universal set and the other sets in the following Venn diagram.



$\mathcal{E} =$	
$A =$	
$B =$	

2. (a) Construct a Venn diagram representing the following sets.

$$\mathcal{E} = \{1, 2, 3, 4, \dots, 20\}$$

$$X = \{1, 2, 3, 4, 9, 10, 13, 14, 16, 17\}$$

$$Y = \{3, 5, 7, 10, 11, 13, 15, 16, 19\}$$

- (b) Use this Venn diagram to find the following set.

$X \cap Y$

3. Use the information below to construct a Venn diagram showing the number of elements in all of the sections.

$$n(\mathcal{E}) = 20, n(K) = 14, n(L) = 13, n(K \cap L) = 10$$

4. There were 100 students in year 8 at a school.
 40 wanted to study technology.
 35 wanted to study graphics.
 26 wanted to study graphics but not technology.

Construct a Venn diagram representing this information completing all sections of the diagram.

How many students did not want to study either of these two subjects?