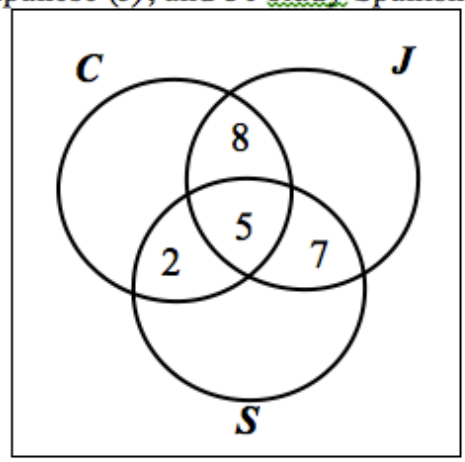
NAME:_____ DATE: 08/14A-15B/2017

ASSIGNMENT: Double and Triple Venn Diagrams
DIRECTIONS: To analyze a Venn Diagram, start from the inside and work your way outwards if possible.

1. *[Maximum mark: 5]*
The Venn diagram below shows information about 120 students in a school. Of these, 40 study Chinese (*C*), 35 study Japanese (*J*), and 30 study Spanish (*S*).



A student is chosen at random from the group. Find the probability that the student

(a) studies exactly two of these languages; *[1 mark]*

(b) studies only Japanese; *[2 marks]*

(c) does not study any of these languages. *[2 marks]*

NAME:_____ DATE: 08/14A-15B/2017

50 students at Rambling High School were asked how they travelled to school yesterday. All of the students travelled by bus, by car or walked.

12 students travelled by car only
7 students travelled by bus only
5 students travelled by car and walked, but did not use a bus
10 students travelled by bus and walked, but did not use a car
3 students used all three forms of travel.

(a) Represent this information on a Venn Diagram.

There were 28 students who used a bus to travel to school.

(b) Calculate the number of students

(i) who travelled by car and by bus but did not walk;

(ii) who travelled by car.

Tomoko used a bus to travel to school yesterday.

(c) Find the probability that she also walked.

Two students are chosen at random from all 50 students.

(d) Find the probability that

(i) both students walked;

(ii) only one of the students walked.