

Name \_\_\_\_\_

Date \_\_\_\_\_

### Using Venn Diagrams Problems - Independent Practice Worksheet 1

Complete all the problems. Make sure to draw Venn diagrams to help you solve the problems.

1) Out of fifty students; 19 are taking English Composition and 34 are taking Chemistry. If five students are in both classes, how many students are in English class only?

2) 26 people were surveyed about their choice of cell phones. The survey finds that 14 people have Apple iPhones, 10 have Samsungs, and 5 have Nokias. Four have Apple iPhones and Samsungs, 3 have Apple iPhones and Nokias, and one has a Samsung and a Nokia. If no one has all three kinds of phone, how many people have none of these cell phones?

3) In a class there are: 10 students who play cricket and basketball, 7 students do not play cricket or basketball, 13 students play cricket, 29 students play basketball. Draw a Venn diagram to depict this scenario.

4) In a class there are 30 students. 21 students like Math, 16 students like English, 6 students don't like Math or English, How many students like both Math and English?

5) In a class of 32 students; 20 say that they like cake and 14 say that they like burgers. There are 6 students who do not like either. How many of them like both cake and burgers?

6) 20 people are found in a room. 15 of these people are holding water bottles. 8 people are reading a magazine. Everyone is either holding a water bottle or reading a magazine. How many people are doing both activities?

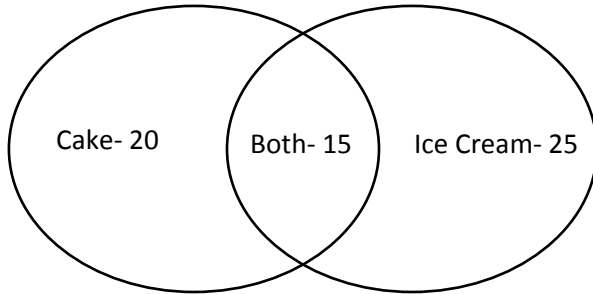


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7) A bag pocket has 20 pens that are red or blue. 8 working pens are blue and 6 working pens are red. The remaining pens in the pocket do not work at all. How many pens do not work?

8) The number of students who like cake and ice cream are shown below:



- a) How many number of students like cake?
- b) How many number of students like ice cream?
- c) How many number of students like only cake?
- d) How many number of students like only ice cream?
- e) How many number of students like both cake and ice cream?

9) In a camp there are a total of 40 students. 32 students play only tennis and 5 students play only hockey. How many student play both hockey and tennis?

10) 32 students took part in a survey. Students were asked if they had a cat or dog as a pet at home. 10 students said they had only ever had a dog. 8 students said they had only ever had a cat. 8 students said they had both. 6 students said they had never had a dog or a cat. Draw a Venn diagram to display this.

