

For each problem, make a Venn diagram, and show how you found the solution. Please work this assignment on a separate sheet of paper where you have room to show your work.

1. There are 14 people in the room.

8 are wearing something red

9 are wearing something blue

4 are not wearing anything red or blue

How many are wearing both something red and something blue?

2. 18 people will be eating pizza

10 people do not like mushrooms

12 people like pepperoni

3 people don't like either mushrooms or pepperoni

How many people like both mushrooms and pepperoni?

3. Three popular courses at MacArthur Junior High are geography, art, and science. A review of the schedules of 200 students showed that:

70 students have geography

80 students have science

60 students have art

35 students have geography and science

33 have geography and art

31 have science and art

15 have geography, science, and art

How many of the 200 students have none of these courses?

4. Ms Geometry prepared a set of 24 polygons for her class:

8 polygons are triangles

8 polygons have parallel sides

13 polygons have line symmetry

No triangles have parallel sides

Of the polygons that have parallel sides, the same number have line symmetry as do not have line symmetry

3 triangles have line symmetry

How many polygons are not triangles, not symmetric and do not have parallel sides?