

The Greek Exhibit

The science museum was hosting a wonderful event! It was all about ancient Greece. While visiting, you could attend the exhibit of ancient Greek artifacts, a movie on ancient Greek culture, or a lecture on Greek architecture. On the first day of the exhibit, the museum surveyed the first fifty people to leave. They were asked if they had visited the Greek exhibit, seen the movie, or attended the lecture. Use the information below to answer the questions.

- * Four percent of the people surveyed had not been to the Greek exhibit, movie, or lecture. They had visited the hands-on science lab.
- * Eleven people had visited all three Greek events.
- * Two people had attended only the lecture. They planned to return later.
- * The number of people who had gone to the exhibit and the lecture but not the movie was one less than five times the number of people who had gone to the movie and the lecture but not the exhibit.
- * Twenty-two people had been to the lecture and at least one other Greek event.
- * Eighteen of the people surveyed had not seen the movie.
- * Ten people had been to only one Greek event.

How many of the people surveyed had not attended the lecture? _____

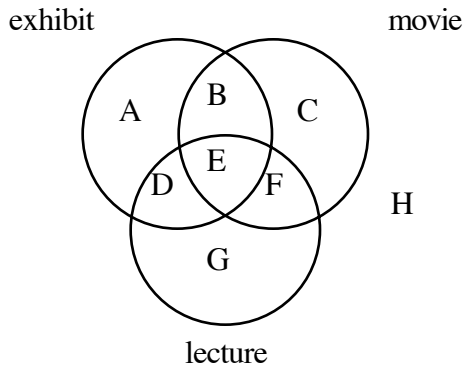
How many of the people surveyed visited the exhibit of Greek artifacts? _____

How many of the people surveyed had visited the exhibit and seen the movie but had not attended the lecture? _____

What percentage of the people surveyed had not visited the exhibit? _____

What fraction of the people surveyed had been to more than one of the Greek events? _____

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- clue 1: $H=4\%$ of 50 = .04(50)
so $H=2$
- clue 2: $E=11$
- clue 3: $G=2$
- clue 4: D was 1 less than 5 times F
 $D=5F-1$
- clue 5: $D+E+F=22$
*(from clue 4) $D=5F-1$
*(from clue 5) $D+11+F=22$
so $D+F=11$
so $F=2$ and $D=9$
- clue 6: $A+D+G+H=18$; $A+9+2+2=18$
so $A=5$
- clue 7: $A+C+G=10$; $5+C+2=10$
so $C=3$
- From the problem,
 $A+B+C+D+E+F+G+H=50$
 $5+B+3+9+11+2+2+2=50$
so $B=16$

A= 5	E= 11
B= 16	F= 2
C= 3	G= 2
D= 9	H= 2

Twenty-six of the people surveyed had not attended the lecture.

Forty-one of the people surveyed visited the exhibit of Greek artifacts.

Sixteen of the people surveyed had visited the exhibit and seen the movie but had not attended the lecture.

What percentage of the people surveyed had not visited the exhibit? 18%

What fraction of the people surveyed had been to more than one of the Greek events?

$19/25$ ($38/50$)