



Problem of the Week

Problem B and Solution

The First Five Modern Olympics

Problem

In August 2024, Paris, France will host the Summer Olympic Games. The table below contains information about the sports that were at some of the first five modern Olympic Games.

Year	Location	Sports
1896	Athens, Greece	athletics, road cycling, track cycling, fencing, gymnastics, shooting, swimming, tennis, weightlifting, wrestling
1900	Paris, France	archery, athletics, Basque pelota, cricket, croquet, track cycling, equestrian, fencing, football, golf, gymnastics, polo, rowing, rugby, sailing, shooting, swimming, tennis, tug-of-war, water polo
1904	St. Louis, USA	archery, athletics, boxing, track cycling, diving, fencing, football, golf, gymnastics, lacrosse, roque, rowing, swimming, tennis, tug-of-war, water polo, weightlifting, wrestling
1908	London, England	archery, athletics, boxing, track cycling, diving, fencing, figure skating, football, field hockey, gymnastics, jeu de paume, lacrosse, polo, rackets, rowing, rugby, sailing, shooting, swimming, tennis, tug-of-war, water motorsports, water polo, wrestling
1912	Stockholm, Sweden	athletics, road cycling, diving, equestrian, fencing, football, gymnastics, modern pentathlon, rowing, sailing, shooting, swimming, tennis, tug-of-war, water polo, wrestling

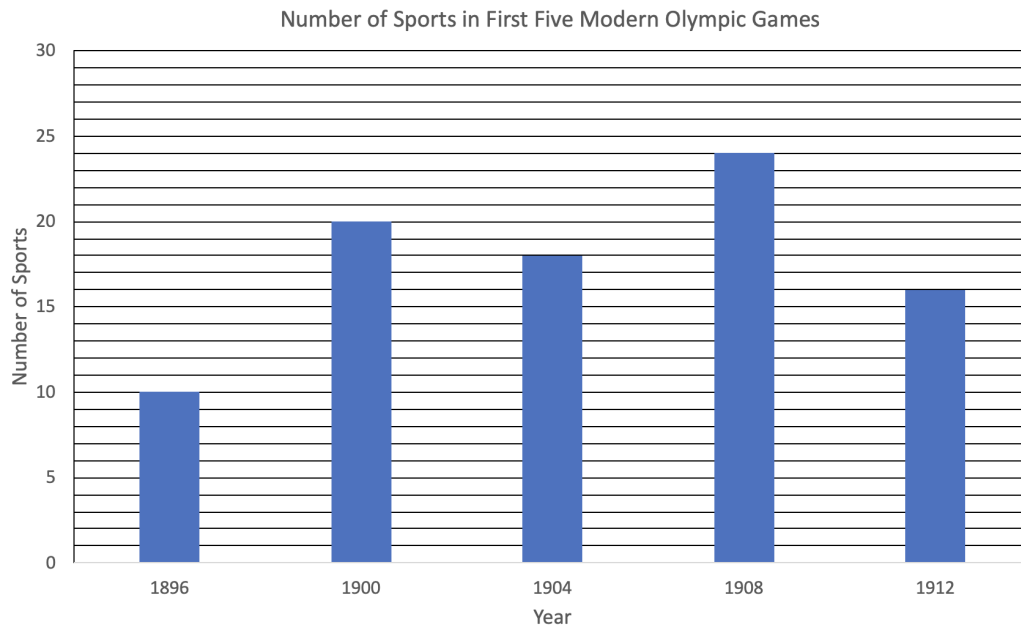
- (a) Create a graph that displays the number of sports in each of the first five modern Olympic Games.
- (b) State five observations/conclusions from your graph.





Solution

(a) Answers may vary. A bar graph displaying this information is shown below.



(b) Observations gleaned from the graphs will vary. Here are some possible observations.

- The fewest number of sports occurred in the year 1896.
- The most number of sports occurred in the year 1908.
- Other than 1896 and 1908, there were about the same number of sports (between 16 and 20).
- The number of sports doubled from 1896 to 1900.
- 18 is the median number of sports. (Since there are five bars, the third highest bar is the median.) This occurred in the year 1904.
- There doesn't seem to be a steady increase in the number of events, so it would be hard to predict how many events future games would hold.