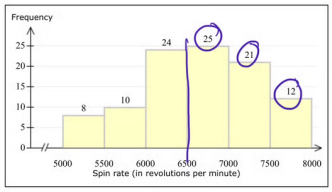
Stats / Interpreting relative frequency histograms

Interpreting relative frequency histograms

A professional golfer is shopping for a new brand of golf ball. She likes most of the features of one particular brand, but she wants to make sure that the brand has a desirable spin rate (the rate at which the ball spins on its axis after being struck by a golf club). To test the spin rate of this new brand of ball, the golfer hits the brand of ball on 100 shots, and a computer measures the spin rate for each shot. The computer then produces the following histogram summarizing the 100 spin rates.



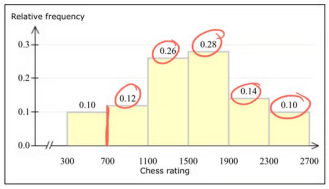
25 + 21 + 12 = 58/100

Based on the histogram, find the proportion of spin rates in the sample that are greater than or equal to 6500 revolutions per minute. Write your answer as a decimal, and do not round your answer.

0.58

Interpreting relative frequency histograms

A recent study of 50 U.S. chess players details such things as the number of years the players have been active and the chess ratings of the players. (A chess rating is a number, with a higher number indicating greater expertise.) The chess rating data for the sample of 50 players are summarized in the following histogram.



Frequency = count them

Relative Frequency = percentage

0.12 + 0.26 + 0.28 + 0.14 + 0.10

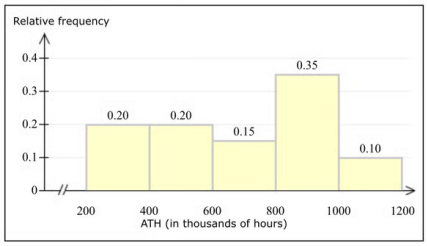
Based on the histogram, find the proportion of chess ratings in the sample that are greater than or equal to 700. Write your answer as a decimal, and do not round your answer.

0.90

Interpreting relative frequency histograms

QUESTION

Accu-Rating has just released its webcast report for last month. The report details the aggregate tuning hours (ATHs) for the top 20 radio stations broadcast over the web. (The ATH for a station is the sum total of all hours that listeners tuned to the station.) The report displays the following histogram:

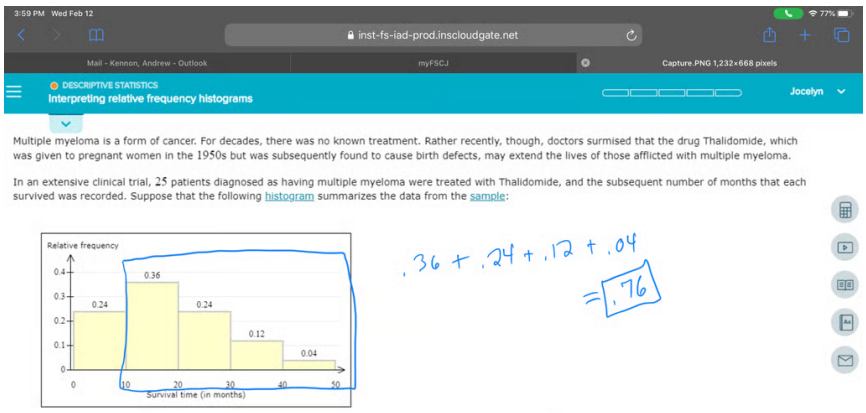


Lower class limit		Upper class limit	Relative Frequency = Percentage
200	–	399	0.20 = 20%
400	–	599	0.20 = 20%
☆ 600	–	799	0.15 = 15%
☆ 800	–	999	0.35 = 35%
☆ 1000	–	1199	0.10 = 10%

class width = upper class limit − lower class limit
(what's the graph/table counting by?)
408 − 208 = 200 OR 200, 400, 600... counting by 200

Based on the histogram, find the proportion of ATHs in the sample that are at least 600 thousand hours. Write your answer as a decimal, and do not round your answer.

0.15 + 0.35 + 0.10 = 0.60



.36 + .24 + .12 + .04 = .76