

LCQ Gross Domestic Product

NAME

This data is a comparing Gross Domestic Product, GDP (per capita, inflation adjusted), with Infant Mortality rate, IMR (number of 0-5 year olds dying per 100).

Countries	GDP	IMR
Nigeria	1956	154
Finland	31684	3.3
Bolivia	37313	61
Congo, Dem. Rep	338	199
Mexico	11772	19
China	5450	24
Hungary	17726	7.1
Bangladesh	1326	62
South Korea	22373	5.4

a) make a scatter plot on your GDC and make a sketch of it below

b) comment on the correlation you see, from the scatter plot.

calculate the correlation coefficient by hand showing both the formula and critical values. (then check against your GDC)

d) Calculate the LSRL by hand in Point - Slope form, showing all details as done in class. If you want you can convert to slope intercept form and check against your GDC.

Geometry/Trig Review Assignment

Name

- Do the problem below on separate paper
- Show your work
- Label each part clearly
- Provide a small, labeled, sketch along with each part

A triangular region is set up for a rock concert, with $AB = 350\text{m}$, $AC = 200\text{m}$ and angle $CAB = 112^\circ$.

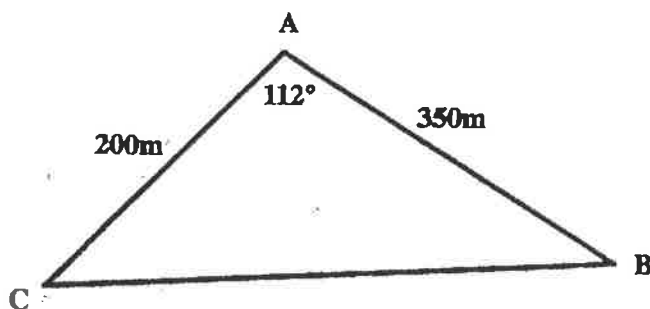


diagram not to scale

- (a) Calculate the total amount of rope needed to enclose concert region. [4]

The number of tickets issued is 78,000. Safety regulations state that a maximum of 2.5 people per square metre are allowed in a given space.

- (b) Calculate the area of the concert region. [3]

- (c) Determine, giving a reason, whether this concert region violates the safety regulations. [2]

- (d) Find the size of angle ABC. [3]

- (e) A video drone is hovering at point P, 50m directly above point A. Calculate the distance from the drone to point ~~A~~ B [3]

- (f) Calculate the angle of elevation from point B to the drone. [2]