

FIT3179

Data Visualisation

Week 8 Workshop

Map Idioms



Activity A – Choropleth Maps

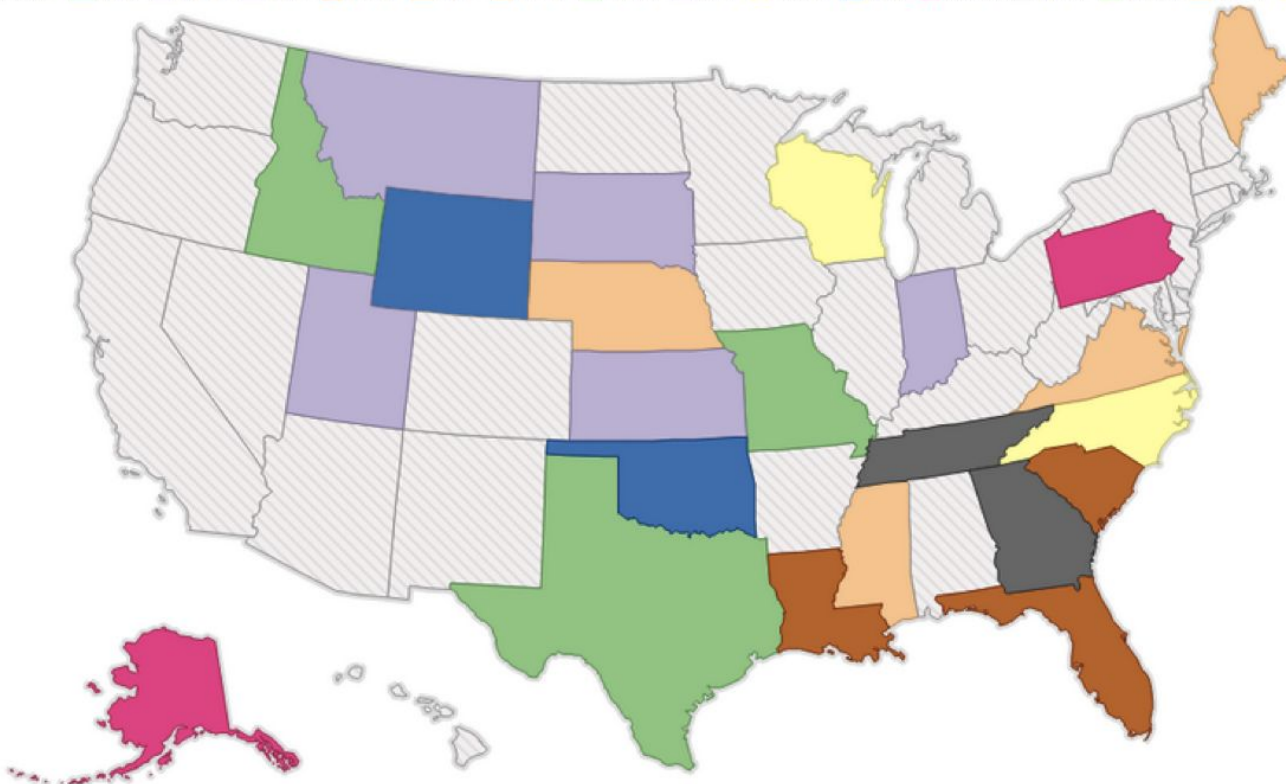
The map below is a disaster.

List its **three major flaws** and suggest how they can be fixed.

Leaving Money on the Table

The amount of federal funds, in billions, that 24 states lost by refusing to expand Medicaid

\$1.5 \$66.1 \$33.7 \$3.3 \$17.3 \$5.3 \$15.8 \$3.1 \$14.5 \$17.8 \$2.1 \$39.6 \$8.6 \$37.8 \$22.5 \$65.6 \$14.7 \$12.3 \$1.4



FLAW 1:
FIX:

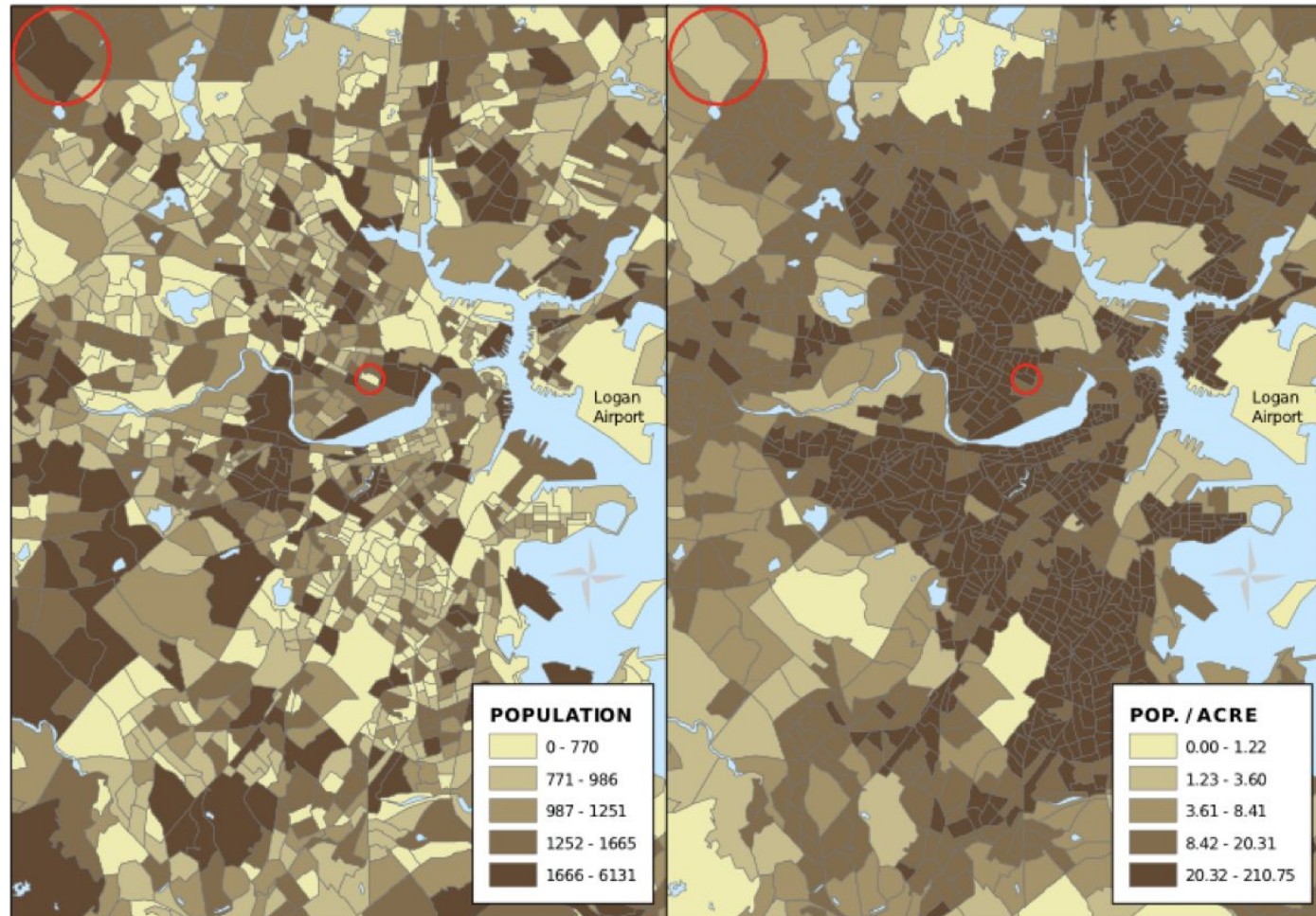
FLAW 2:
FIX:

FLAW 3:
FIX:

Activity B – Choropleth Maps

Write one sentence that explains why the left map is misleading and the right map is correct.

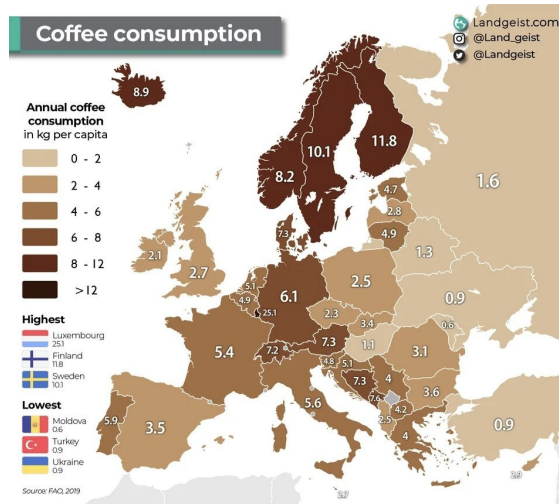
Total Population of 2000 Census Block Groups Population Density of 2000 Census Block Groups



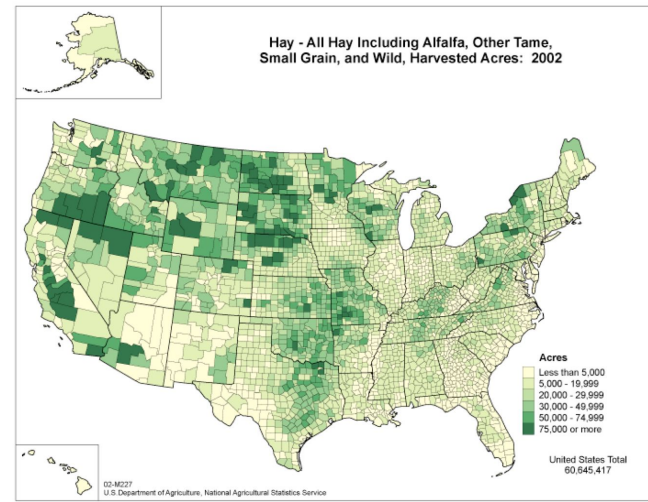
Activity C – Choropleth Maps

Critique the map below. Is there something wrong?

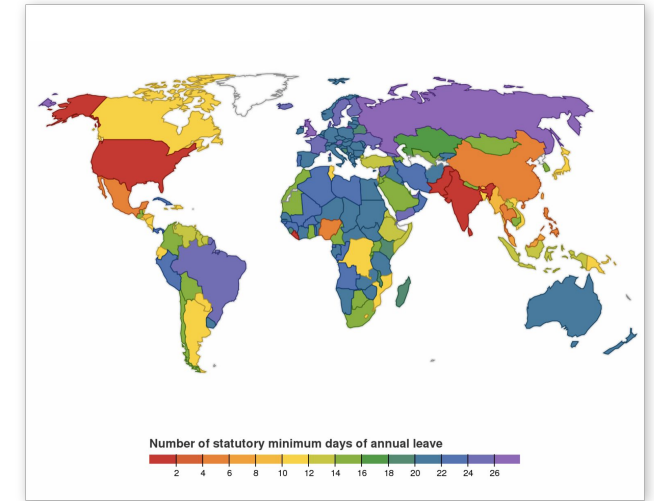
1)



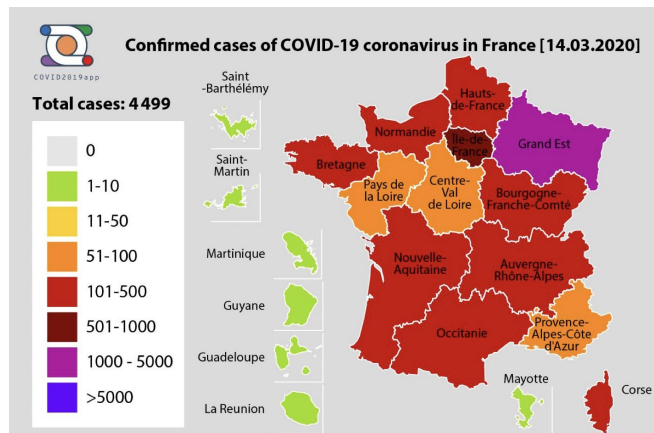
2)



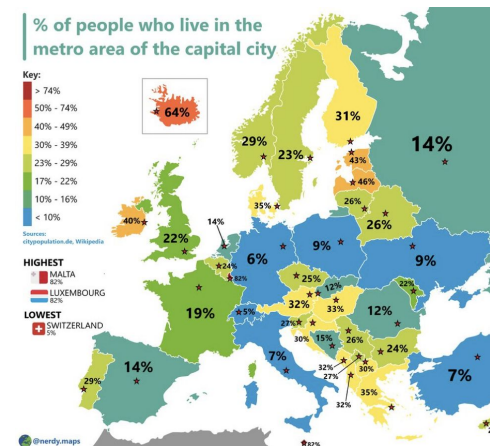
3)



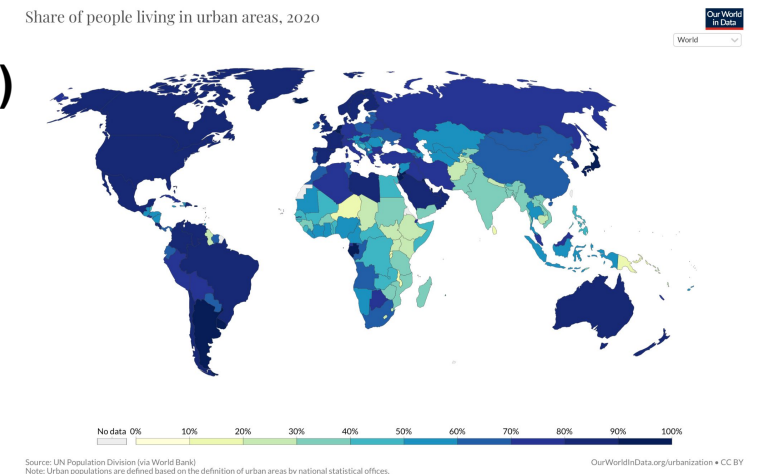
4)



5)

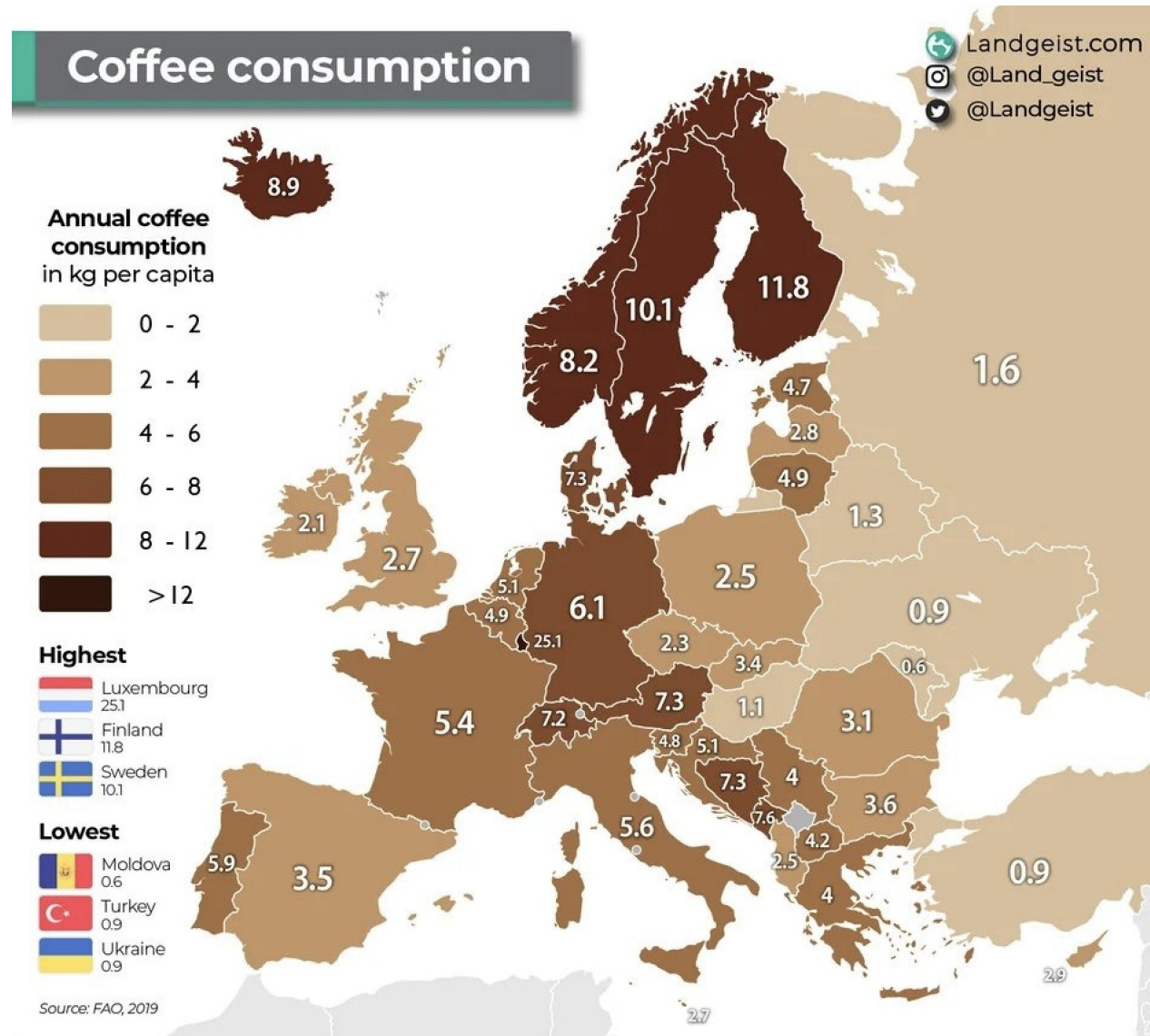


6)



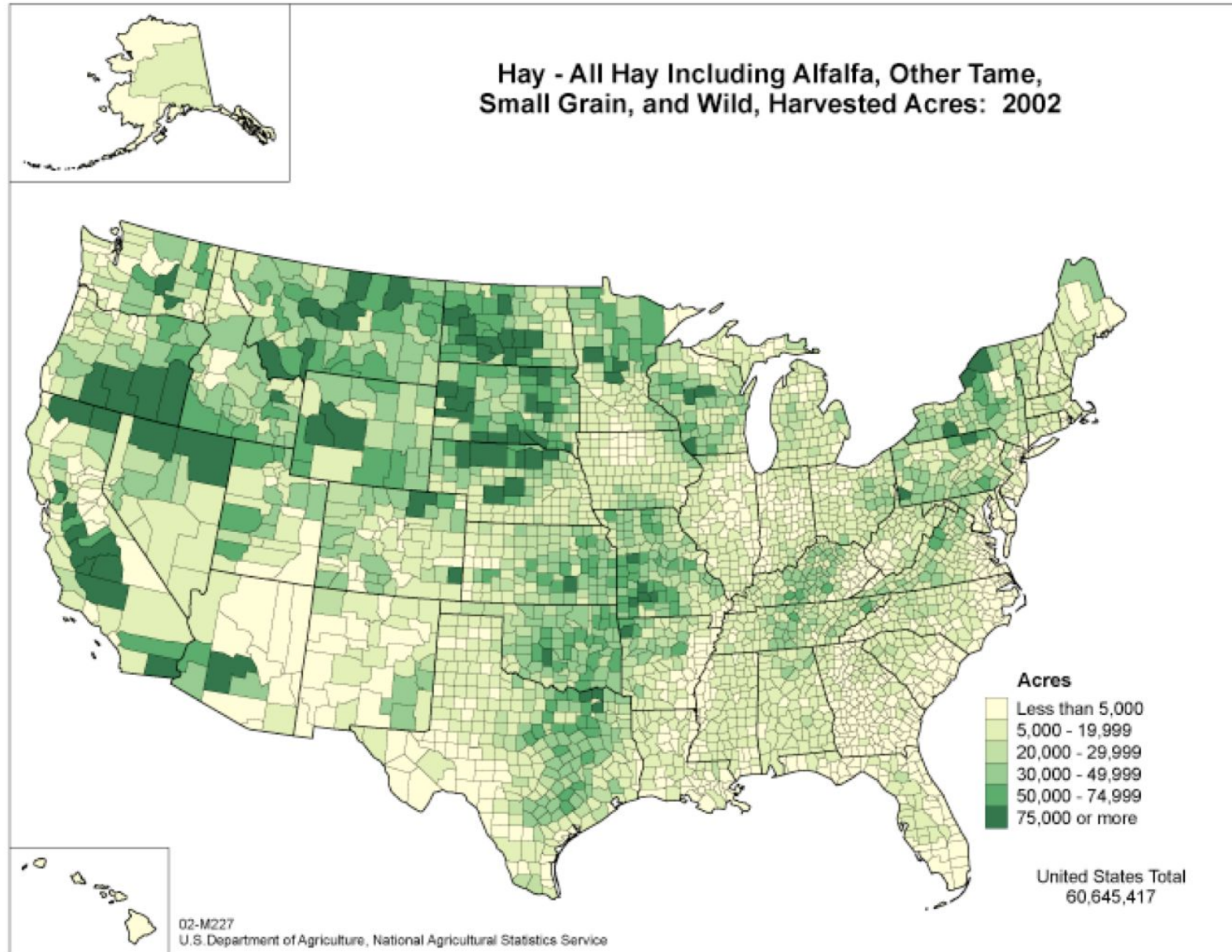
Activity C – Choropleth Maps

Example 1)



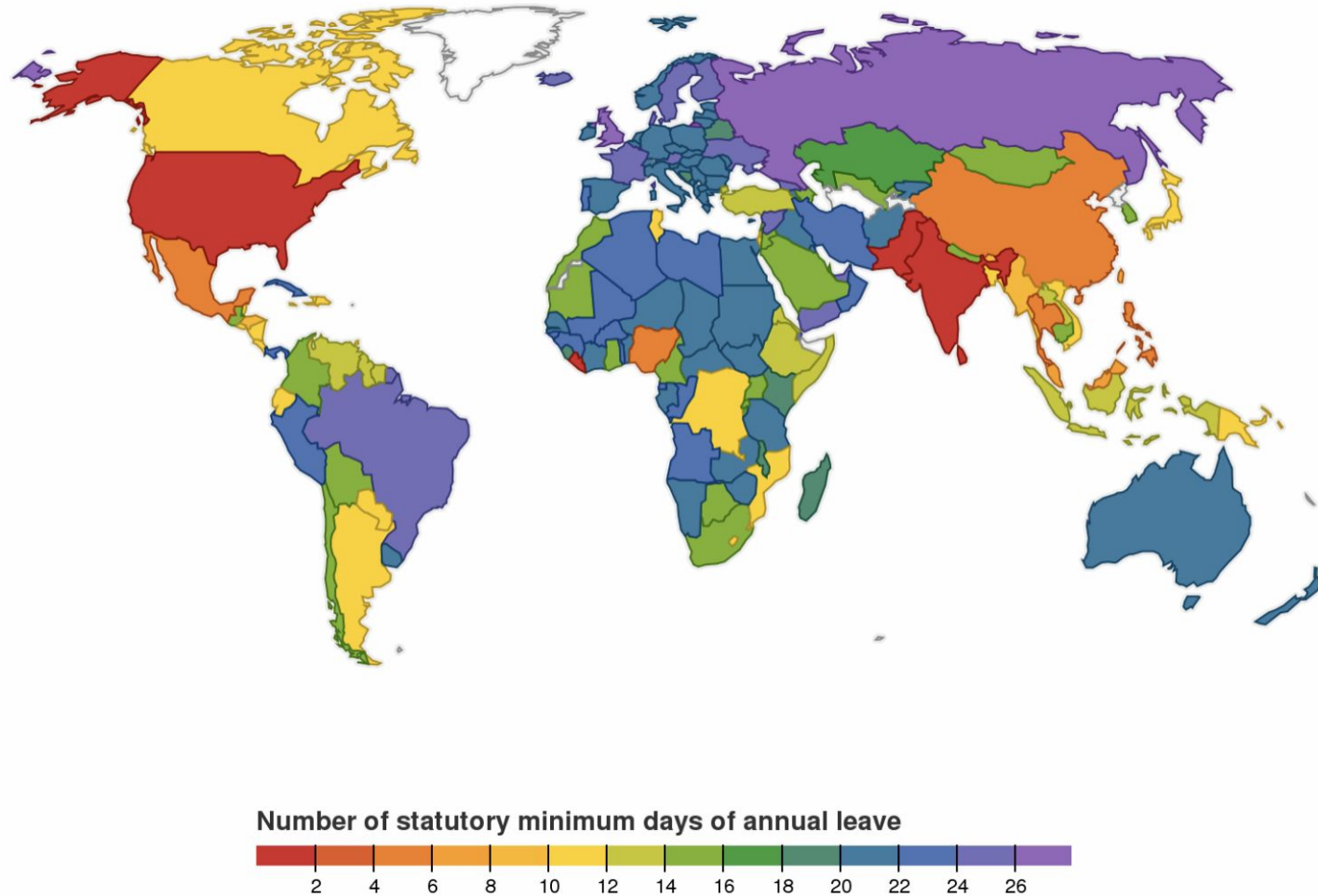
Activity C – Choropleth Maps

Example 2)



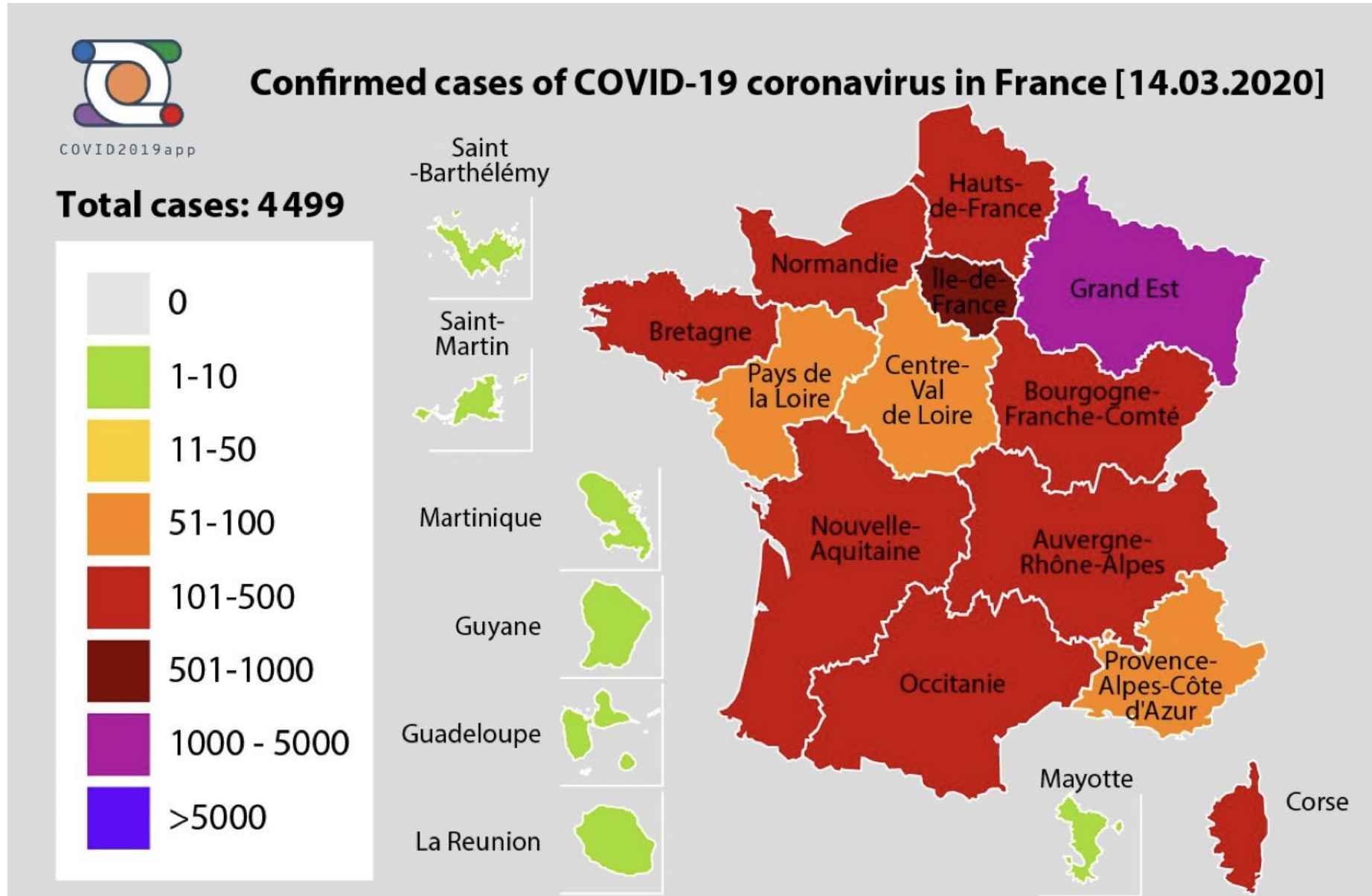
Activity C – Choropleth Maps

Example 3)



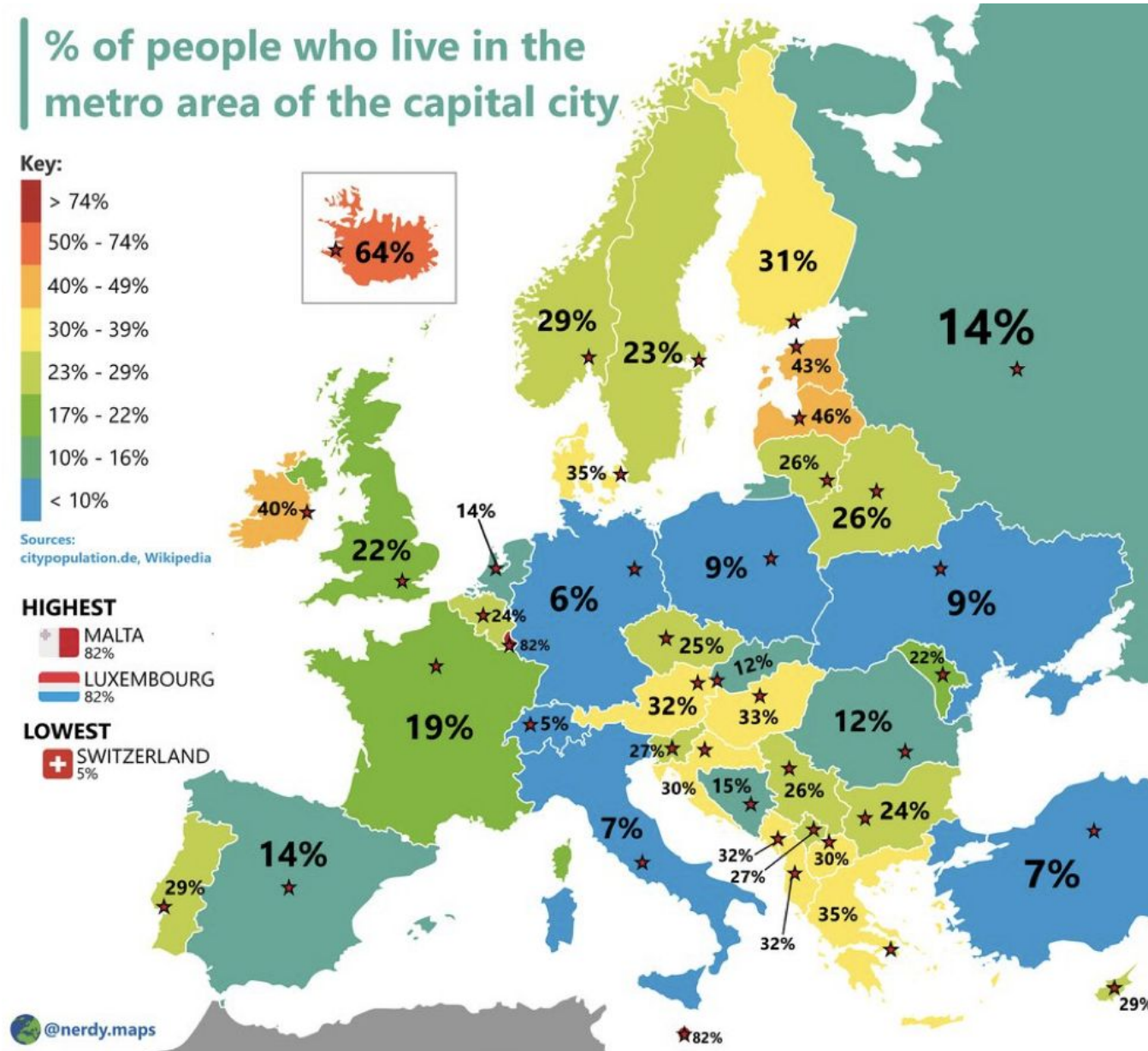
Activity C – Choropleth Maps

Example 4)



Activity C – Choropleth Maps

Example 5)



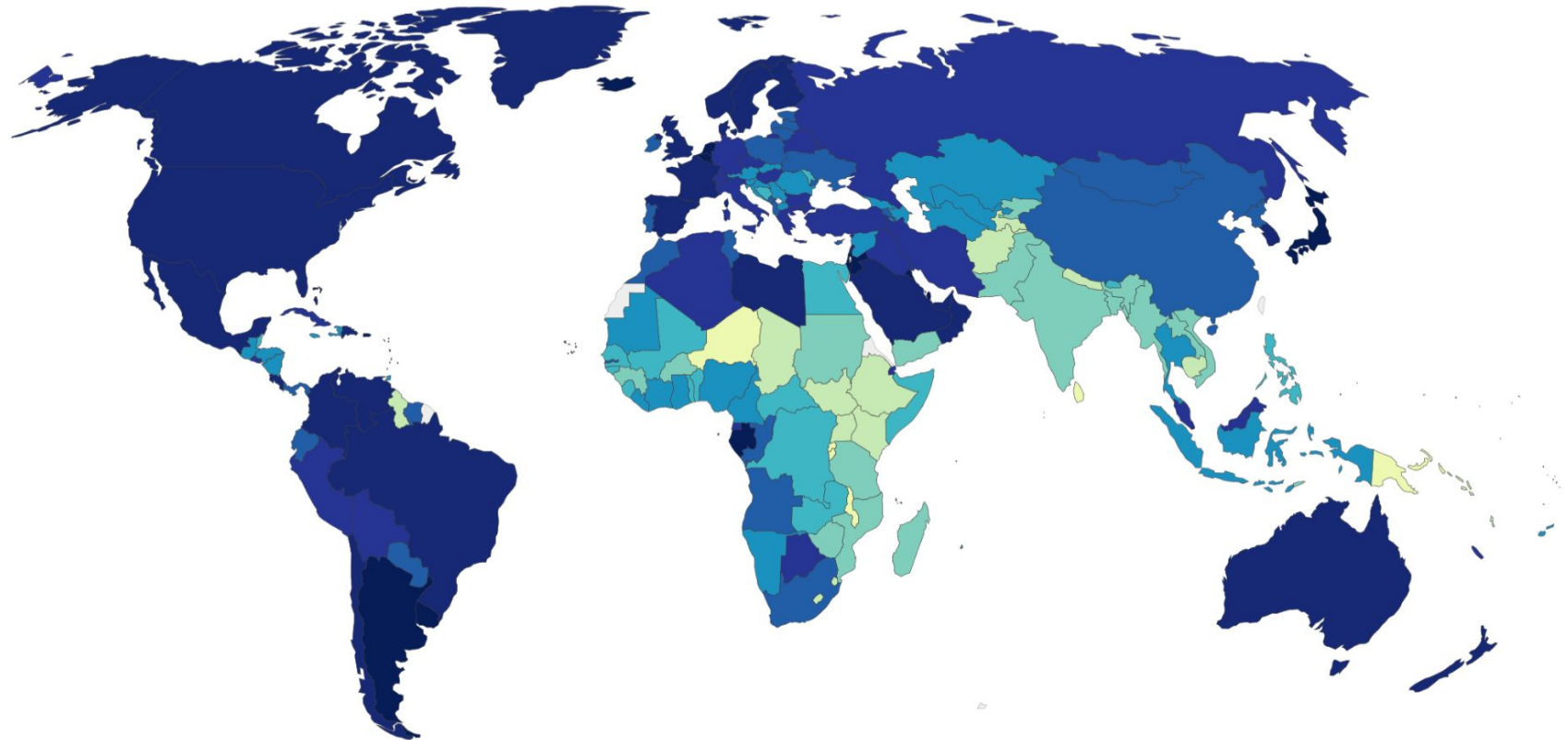
Activity C – Choropleth Maps

Share of people living in urban areas, 2020

Our World
in Data

World

Example 6)

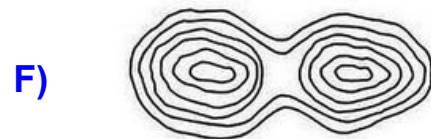
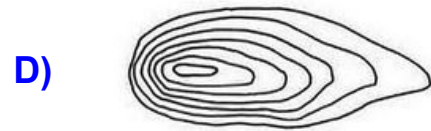
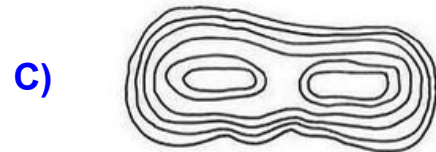
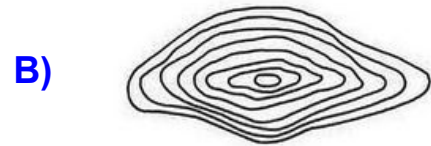
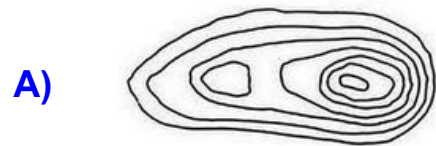


Source: UN Population Division (via World Bank)
Note: Urban populations are defined based on the definition of urban areas by national statistical offices.

OurWorldInData.org/urbanization • CC BY

Activity – Reading Contour Lines

On paper, draw a profile along a horizontal line for each contour map.



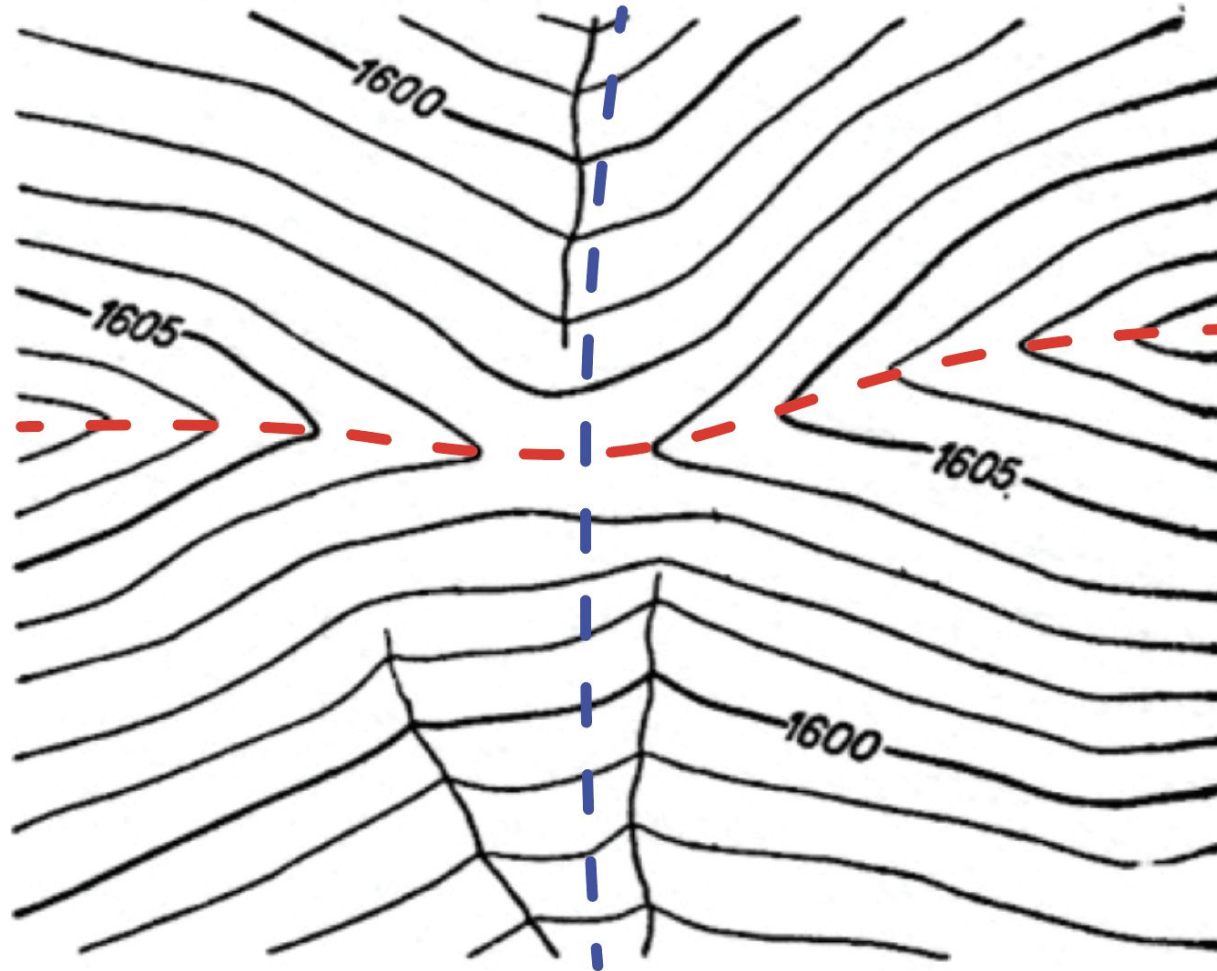
Activity – Contour Profiles

On paper, draw profiles along the red and blue dashed lines for this contour line map. The lines perpendicular to the contour lines are creeks.

Where are the highest and lowest points on this map?

Mark them if they are on your profile.

What kind of topography is this?



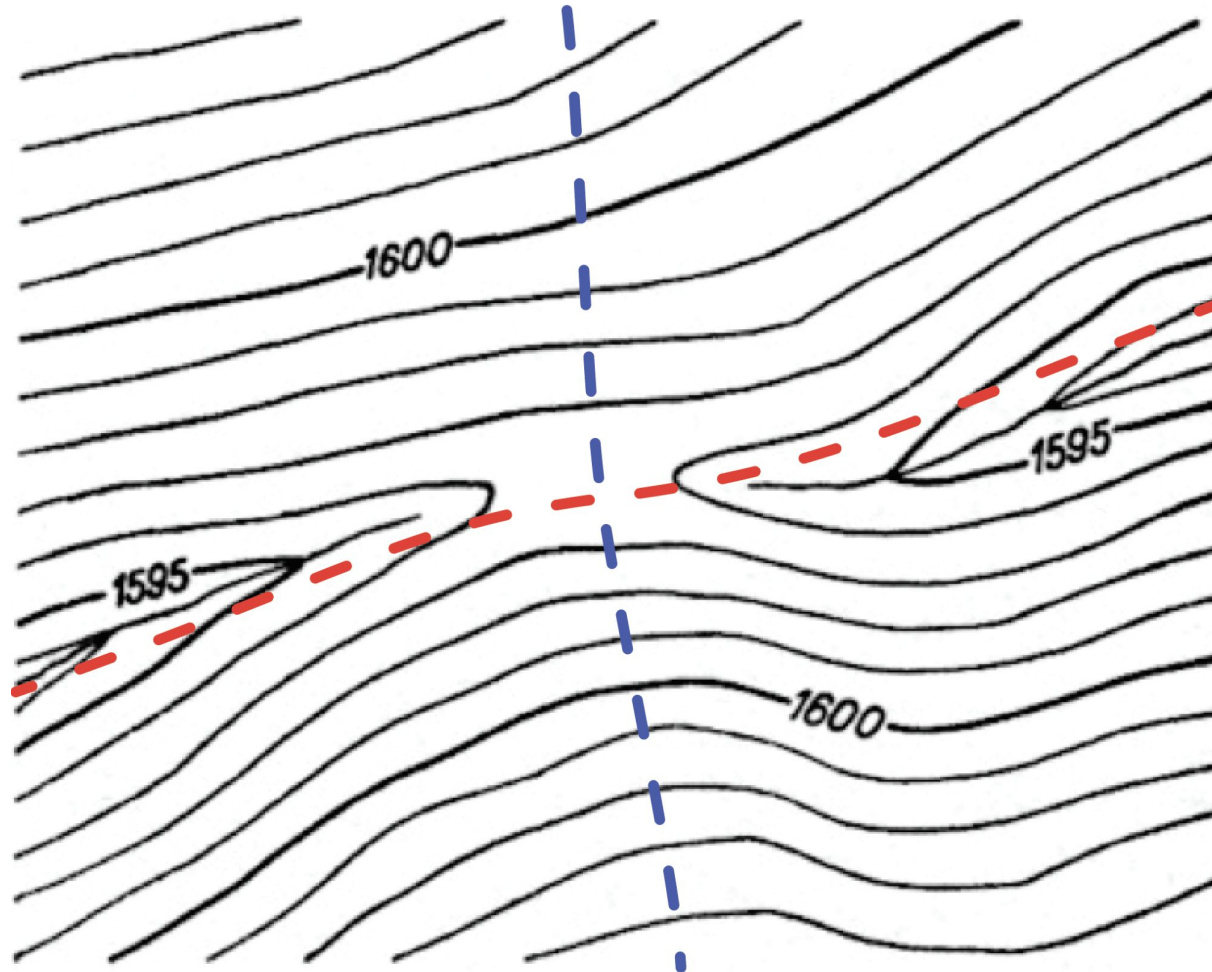
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Activity – Selecting a Map Idiom

The Victoria Department of Energy, Environment and Climate Action runs a citizen science project where people report observed animals. You create a small map of observed magpies from this dataset. There are several thousands of magpies stored in this geometry point dataset.

1. What are three map idioms that you can use to visualise this point dataset?
2. Sketch the three maps.
3. What are the pros and cons of each idiom?
4. Is it necessary to transform the point geometry to another dataset type? How do you create the new dataset type?

1. Idiom:

2. Pros & cons:

3. Transformation:

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2. Pros & cons:

3. Transformation:

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