

## Solutions

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Each answer shows the steps, then the **result**.

### 2.1

- a reference map shows locations/features; a thematic map shows the pattern of one variable

### 2.2

- the Earth is a sphere and a map is flat; flattening a curved surface must distort shape, area, distance, or direction

### 2.3

(a)

- direction / true shape locally

(b)

- it exaggerates area toward the poles (e.g. Greenland looks huge)

### 3.1 B

- it maps the spatial pattern of one variable, so it is a thematic map

### 3.2 B

- Mercator preserves direction, which is why it was designed for navigation

### 3.3

(a)

- the neighbourhood street map

(b)

- fine local detail — individual streets/buildings