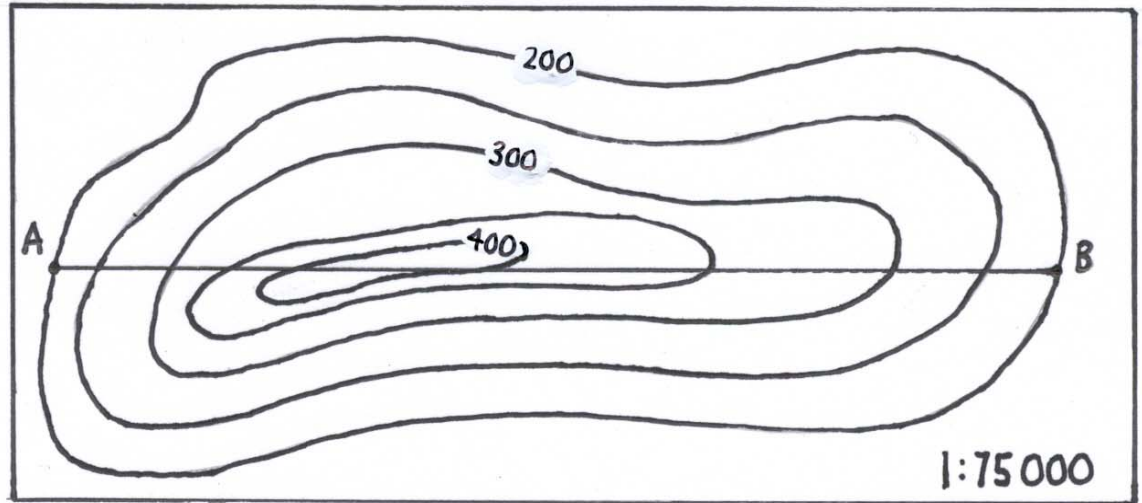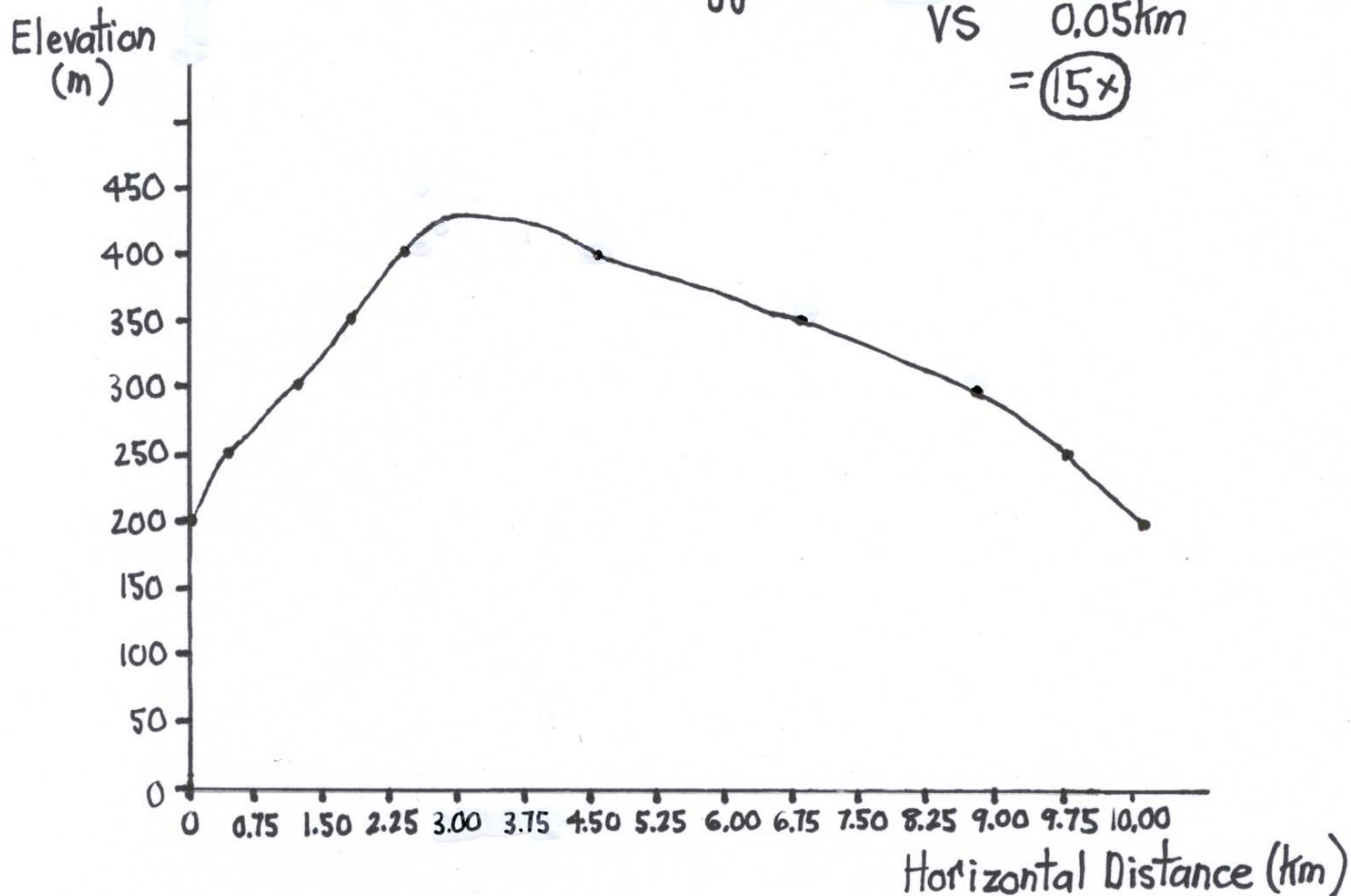# Geography 12
Cross-Section Profile Practice
Calculating Vertical Exaggeration Practice Key

1)   Construct a cross-section profile for A to B. Use a Vertical Scale of 1cm represents 50m.   Also calculate the vertical exaggeration for the profile.

200

300

A   400)   B

1:75 000

Horizontal Scale - 1:75 000 1cm represents 0.75km
Vertical Scale - 1cm represents 50m or 0.05km

$$\text{Vertical Exaggeration} = \frac{HS}{VS} = \frac{0.75km}{0.05km}$$

$$= \boxed{15\times}$$

Elevation
(m)

450

400

350

300

250

200

150

100

50

0

0   0.75 1.50 2.25 3.00 3.75 4.50 5.25 6.00 6.75 7.50 8.25 9.00 9.75 10.00

Horizontal Distance (km)

2) Construct a cross-section profile for A to B. Use a Vertical Scale of 1cm represents 200m. Also calculate the vertical exaggeration for the profile.
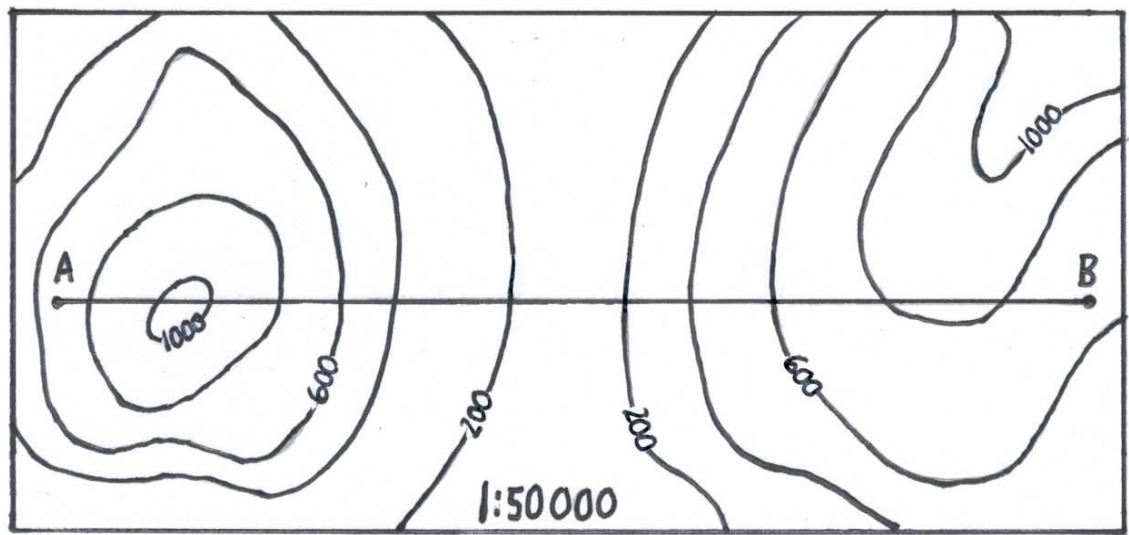

1:50000

Horizontal Scale - 1:50000 1cm represents 0.5km
Vertical Scale - 1cm represents 200m or 0.2km

$$\text{Vertical Exaggeration} = \frac{HS}{VS} = \frac{0.5km}{0.2km}$$

$$= \boxed{2.5\times}$$

Elevation (m)

Horizontal Distance (km)