Time: 90 min.

20 points

Task 1

The public company Ski Resorts of Serbia is planning to build a ski track with accompanying contents in Avala (Fig. 1). Look at the plan below and do SWOT analysis with at least three answers.

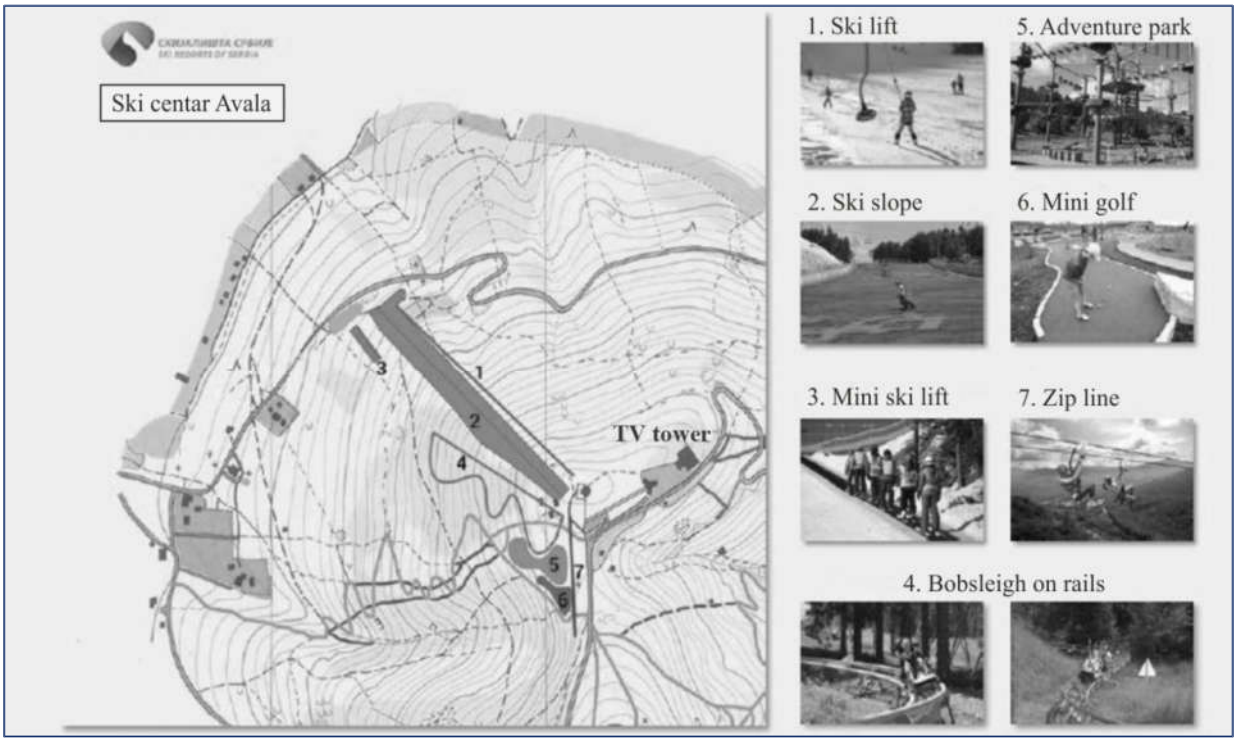


Fig. 1

Strengths	***Weaknesses***
1. Close to Belgrade 2. Good slope for skiing 3. Good exposition (NW) 4. Good infrastructure 5. Many attractions beside (0,5 pts for each of three right answer)	1. Height of mountain (temperature) 2. Not enough snow 3. Destroying protected nature 4. Only one short ski slope 5. Problem to make enough artificial snow (0,5 pts for each of three right answer)
Opportunities	***Threats***
1. New jobs for locals 2. An increase in the number of tourists 3. Cheaper winter activities 4. More money for local development 5. New events for Avala tourism (0,5 pts for each of three right answer)	1. Costly 2. Historical importance will lose value 3. Deforestation/problem with clean air for Belgrade 4. New landslide/torrent erosion 5. Problem with the local population protest (0,5 pts for each of three right answer)

(6 points)

Task 2

Lapse rate is the rate at which air temperature falls with increasing altitude at every 100 m. Using a lapse rate of 0.6 ° C, calculate the average monthly temperatures at the top of Avala considering the data from the Belgrade Meteorological Station located in Košutnjak.

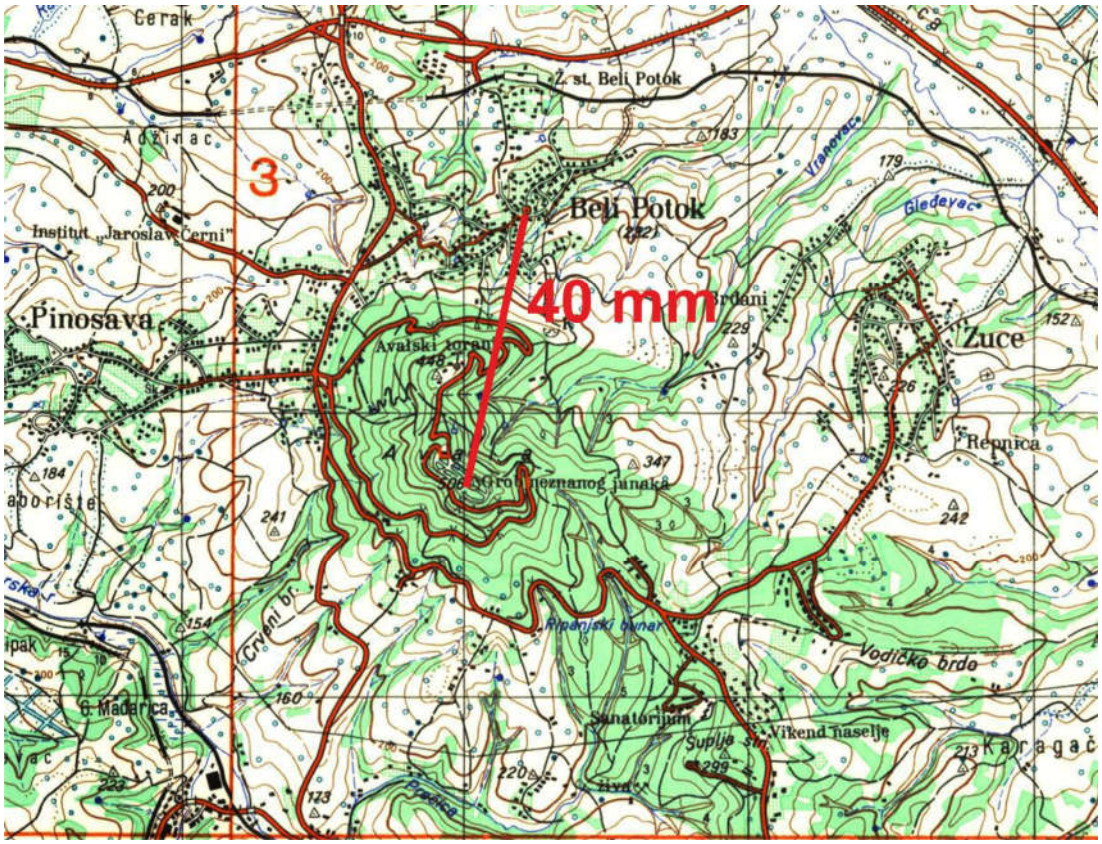
506 m – 203 m = 303 (about 300m); (300/100) * 0,6 = 1,8°C or -1,8°C

Average/month	Months											
	Jan	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
T°C (Košutnjak, 203 m a.s.l.)	1.1	3.0	7.3	12.7	17.3	20.3	22.3	22.5	18.2	13.1	7.3	2.3
T°C (Avala, 506 m a.s.l.)	-0.7	1.2	5.5	10.9	15.5	18.5	20.5	20.7	16.4	11.3	5.5	0.5

(4 pts)

Task 3

Calculate the air distance between the church in Beli Potok and the top of Avala. For your calculation, use the map of Avala and its surroundings (Fig. 2; scale 1:50.000)



Calculation:

40 mm (+- 2 mm) * 50 m (scale 1:50.000) = 2000 m

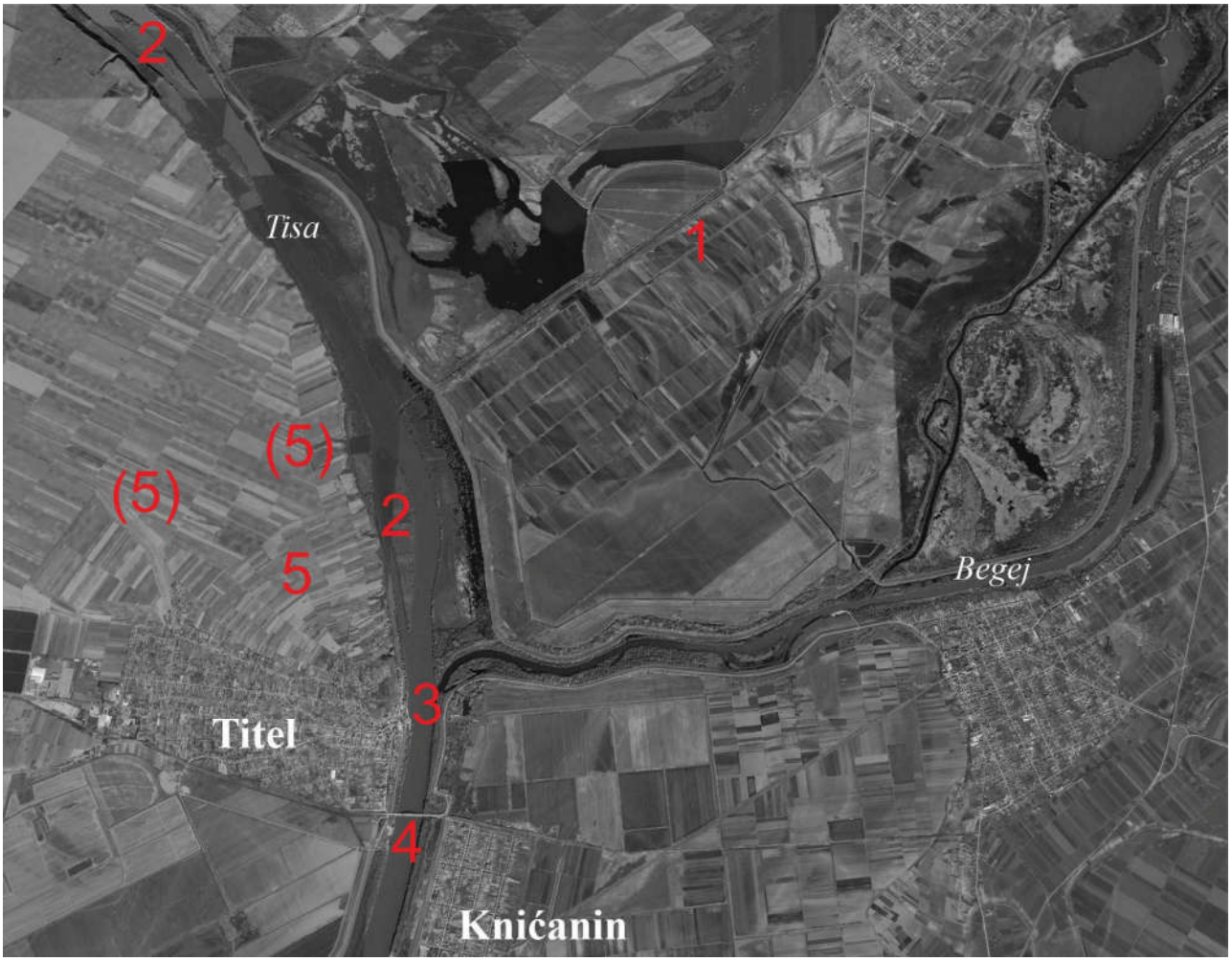
Answer: 2000 m

(3 pts)

Task 4

Remote detection is now an indispensable method of work for every geographer. On the picture below, draw in and number the following landforms and objects:

1. Paleomeander of the Tisa River (2 pts); 2. River island on the Tisa River (1 pts); 3. the Begej River confluence into the Tisa River (1 pts) 4. the brigde that connects settlements Titel and Knićanin (1 pts); 5. the Titel loess plateau (2 pts).



(7 pts)