

Scale Factors and Map Distances

Name _____

Use the Map provided to determine the distances between the given towns. The answers are approximate.

1) Kelowna and Bella Coola

$$5.3 \times 110 = 583 \text{ km}$$

2) Kelowna and Kamloops

$$0.9 \times 110 = 99 \text{ km}$$

3) Fort St. John and Vancouver

$$7.4 \times 110 = 814 \text{ km}$$

4) Williams Lake and Prince George

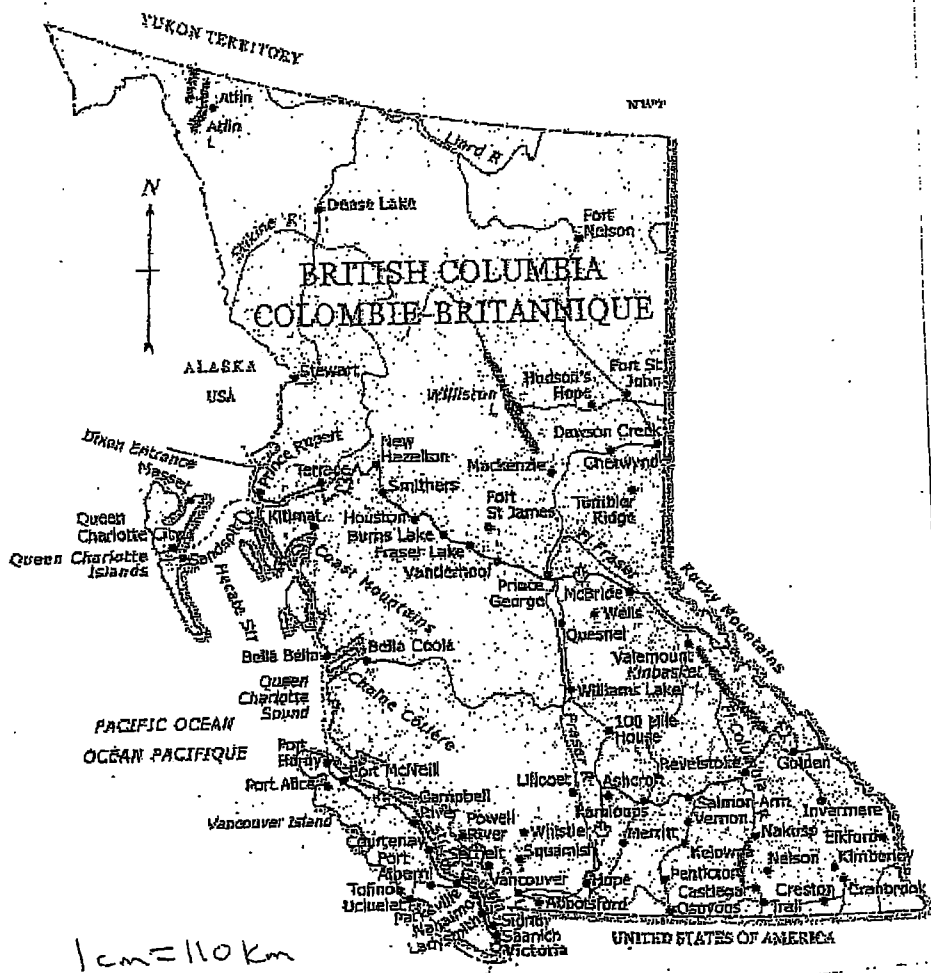
$$1.6 \times 110 = 176 \text{ km}$$

5) Dawson Creek and Prince Rupert

$$5.8 \times 110 = 638 \text{ km}$$

6) Victoria and Powell River

$$1.6 \times 110 = 176 \text{ km}$$



7) Kelowna and Vernon

$$3 \times 110 = 330 \text{ km}$$

8) Kelowna and Golden

$$2.1 \times 110 = 231 \text{ km}$$

9) Hudson's Hope to Tumbler's Ridge

$$1.4 \times 110 = 154 \text{ km}$$

10) Abbotsford and Quesnel

$$4 \times 110 = 440 \text{ km}$$

Determine the scale factor of the maps.

11) 2 towns are 5cm apart on a map. In real life, they are 100km apart. Determine a scale factor for the map.

$$\frac{5 \text{ cm}}{5} = \frac{100 \text{ km}}{5}$$

$$1 \text{ cm} = 20 \text{ km}$$

$$\times 1000$$
$$= 20000 \text{ m}$$

$$\times 100$$
$$= 2000000 \text{ cm}$$

12) 2 towns are 7.2cm apart on a map. In real life, they are 432km apart. Determine a scale factor for the map.

$$\frac{7.2 \text{ cm}}{7.2} = \frac{432 \text{ km}}{7.2}$$

$$1 \text{ cm} = 60 \text{ km}$$

Answers to Scale Factors and Map Distances

1) $d \approx 572 \text{ km}$

2) $d \approx 88 \text{ km}$

3) $d \approx 770 \text{ km}$

4) $d \approx 176 \text{ km}$

5) $d \approx 638 \text{ km}$

6) $d \approx 187 \text{ km}$

7) $d \approx 44 \text{ km}$

8) $d \approx 220 \text{ km}$

9) $d \approx 143 \text{ km}$

10) $d \approx 418 \text{ km}$

11) $1 \text{ cm} = 20 \text{ km}$ or $1:2000000$

12) $1 \text{ cm} = 60 \text{ km}$ or $1:6000000$