Grade 9 Measuring Map Distance Tutorial
In order to find the STRAIGHT LINE distance from “A” to “B” you will need a pencil and a piece of paper.
Topographic Maps
Determining Straight Line Distance

Put the edge of the paper over the map so that it passes through both points.

Mark the two points on the paper.
Put the paper along the appropriate scale on the map and determine the distance between the marks.

In this example, 1km (to the right of the “0”) and 700 m to the left, for a total of 1700 m.
Finding distances along curves is more complicated, but still easy.

Put the edge of the paper over the map so that it aligns with the first segment of the road.

Mark the start point on the paper.
Now mark the furthest point along the edge where it still touches the road.

Keep the pencil point pressed against the page and rotate the paper around it...
Mark the next point, then repeat the procedure.
Topographic Maps
Determining Distance Along a Curve

Keep going, turning the paper to align with the road, marking each point as you go.
Topographic Maps
Determining Distance Along a Curve

…and again…
Topographic Maps
Determining Distance Along a Curve

…and again…
Topographic Maps
Determining Distance Along a Curve

...and again...
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...and again.
Topographic Maps
Determining Distance Along a Curve

Put the paper along the appropriate scale on the map and determine the distance between the marks.

In this example, 1km (to the right of the “0”) and 900 m to the left, for a total of 1900 m.
Another way is to use a piece of string or soft wire.

Start with one end at “A”. Make sure it follows the raid as closely as possible.

Use your finger to mark the end at “B”.
Topographic Maps
Determining Distance Along a Curve

Move the string to the scale, pull it straight and read the distance.

In this case it is almost exactly 1900m.
The UTM Grid squares are 1000m x 1000m (regardless of map scale)

They can be used as a quick method of estimating distance on the map.

Also, for those who are mathematically inclined, on a 1:50,000 scale map, 1cm = 500m. You can use a ruler to measure distances, but be careful…its easy to make mistakes.