# Example Context Elaboration: Shortest Path

Focus: Networks
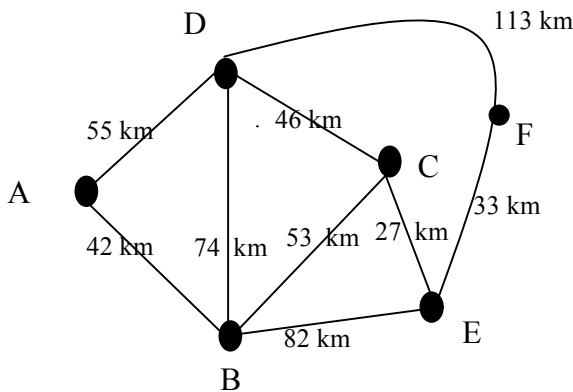
## Achievement objective M7-5

*In a range of meaningful contexts, students will be engaged in thinking mathematically and statistically. They will solve problems and model situations that require them to:*

Choose appropriate networks to find optimal solutions

## Moisha's journey

Moisha, who lives in A, is planning a trip to visit her grandma in F. The map below shows the various routes she could take, along with the distances between the towns along the way (D, B, C, & E).  Moisha has a limited supply of cash for petrol, so she wishes to minimise the distance she travels in her journey.

State the shortest path, and its distance, for Moisha to travel from A to F. Show all working.



*The shortest path is A → B → C → E → F, which is 155 km.*