Problem of the Week
Problem B and Solution
A Cool Trip

Problem
In 1911, the Norwegian explorer Roald Amundsen and his four companions were the first persons to travel to the South Pole. They spent 3 days at the Pole, plus 99 days travelling from their base camp to the Pole and back.

a) The trip from the Pole back to the base camp took 39 days. How many days did the trip from the base camp to the Pole take?

b) On the trip from the Pole back to the base camp, they averaged \(30.4\) km per day. How far was the base camp from the Pole?

c) What was their average speed (in km per day) on the trip from the base camp to the Pole?

Solution

a) The total travel time was 99 days, so the trip to the pole took \(99 - 39 = 60\) days (much longer than the trip back).

b) If they averaged \(30.4\) km per day for 39 days, they travelled a total distance of \(39 \times 30.4 = 1185.6\) km.

c) Since the distance to the pole was also 1185.6 km and they travelled for 60 days, their average speed was \(1185.6 \div 60 = 19.76\) km per day.