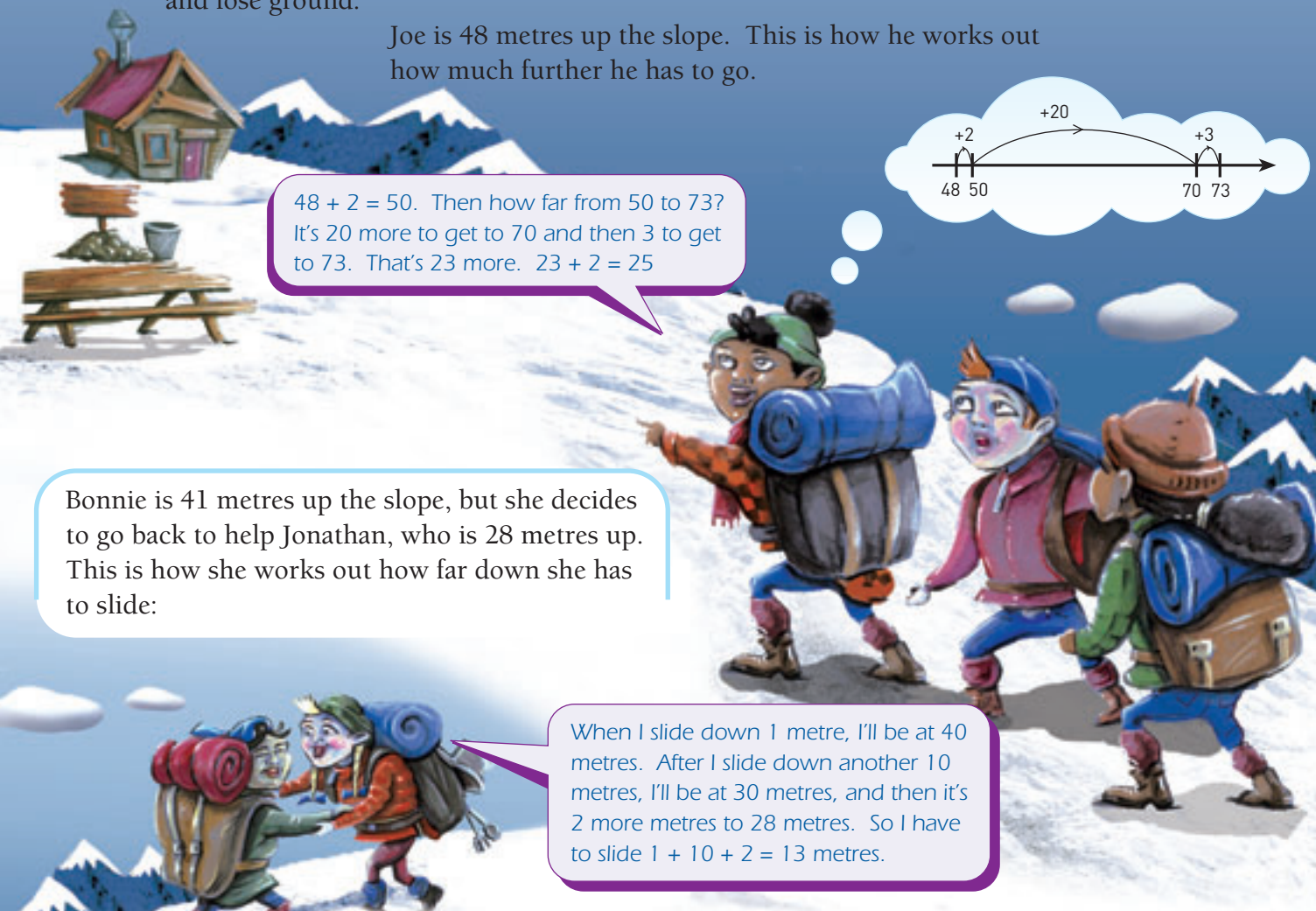
Slippery Slope

You need ☑ a classmate

Activity

Room 7 are on a class tramp on the Wairau Range. They are going to stop for lunch when they get to the top of a slippery snow slope that is 73 metres long.
The students use an up-and-back-through-tens strategy to work out how much further they each have to go to get to the top of the slope. Sometimes they slide backwards and lose ground.

Joe is 48 metres up the slope. This is how he works out how much further he has to go.



Bonnie is 41 metres up the slope, but she decides to go back to help Jonathan, who is 28 metres up. This is how she works out how far down she has to slide:

When I slide down 1 metre, I'll be at 40 metres. After I slide down another 10 metres, I'll be at 30 metres, and then it's 2 more metres to 28 metres. So I have to slide 1 + 10 + 2 = 13 metres.

1. Use the up-and-back-through-tens strategy to find out how far the trampers below have to climb or where they ended up when they slid down the snow slope. Record your working.
   - **a.** Kirsty is at 54 metres. How far is it to the top?
   - **b.** Joy reaches 52 metres and slips back 25 metres. Where does she end up?
   - **c.** Ian reaches 63 metres but slips back to 28 metres. How far does he slip?
   - **d.** Pare is 27 metres from the top. How far up the snow slope is he?
2. Make up some similar problems for a classmate to solve.