

# Leftovers

You need ☒ a calculator

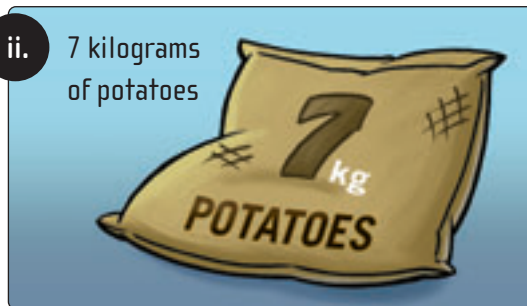
## Activity One

The seniors at Casselburg School are at camp. The students are divided into small groups with a leader. Each day, the leaders get together to divide up some rations and time on the flying fox. On the first day, the 8 group leaders, Kahu, Tessa, Chenda, Shaun, Alice, Thomas, Ese, and Anataara, have these items to share out equally.

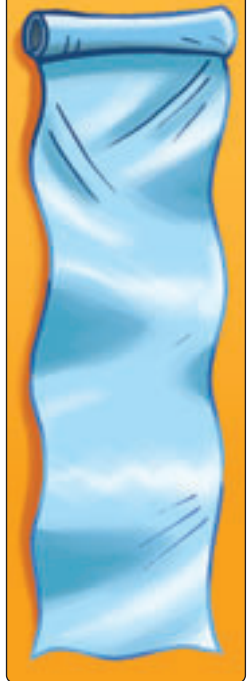
i. 10 litres of milk



ii. 7 kilograms of potatoes



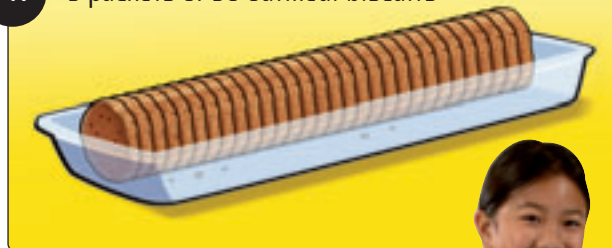
iii. 13 metres of foodwrap



iv. 2 hours and 45 minutes on the flying fox



v. 5 packets of 30 oatmeal biscuits



Chenda uses her calculator to work out each group's share. Sometimes the answer is sensible. Sometimes it isn't sensible or helpful.

I calculated  $7 \div 8 =$  and got 0.875.  
I know what that means in kilograms.

1. Use your calculator to find answers for the five items.

2. Which answers are sensible or helpful? Explain what each of these answers means.

3. a. Which calculator answers are not sensible or helpful? Why not?
- b. How would you turn these answers into numbers that are sensible or helpful?

I calculated  $2.45 \div 8 =$  and got 0.30625, but that doesn't seem right.



## Activity Two

The camp is in the country near the coast. The campers get food from the sea or from around the campsite. Neighbouring landowners also allow them to gather some food items from their land as long as they pay for them.

1. a. The groups led by Kahu, Tessa, Chenda, Alice, and Shaun pick blackberries, catch fish, and gather free-range eggs. They return with:



How should the 5 groups share this food out fairly?

- b. Tessa and Chenda are discussing how much their groups get each.

My calculator says that we get 6.6 punnets of blackberries.

$6 \times 5 = 30$ , so there are 3 punnets left over to share out. So it should be 6.3, shouldn't it?

No, we can each get 6 whole punnets and  $\frac{3}{5}$  of a punnet.

Who is right and who isn't? Explain why.

2. a. The groups led by Thomas, Ese, and Anatara pick cherries, collect shellfish, and gather mushrooms. They come back with:



How should the 3 groups share this food out fairly?

- b. Write the shares that Ese's group gets for cherries, shellfish, and mushrooms, using both fraction and decimal remainders.

3. Look back over Activities One and Two. When is it better to write answers as common fractions, and when is it better to use decimal fractions? Explain your answer.