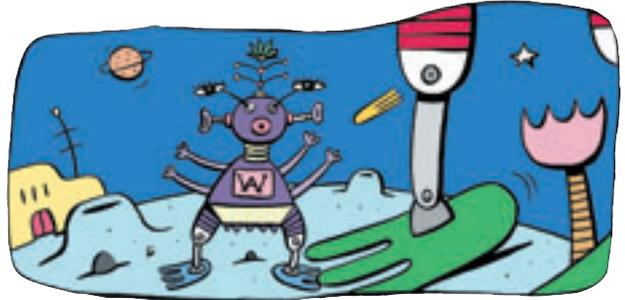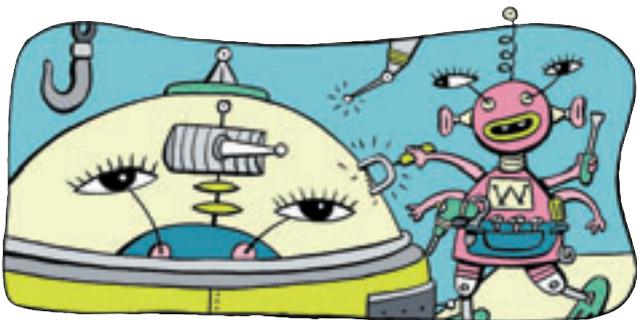# Planet Peewee

**You need** ☑ a calculator ☑ a classmate

Activity

The aliens on Planet Peewee love exploring the universe, but compared with some of the creatures they meet, they are very small. Sometimes the difference can be scary.

So Wozak invented a machine that enlarges them as they travel.

Kenag makes shoes for Peewee explorers that will fit them once they are their new (enlarged) size.
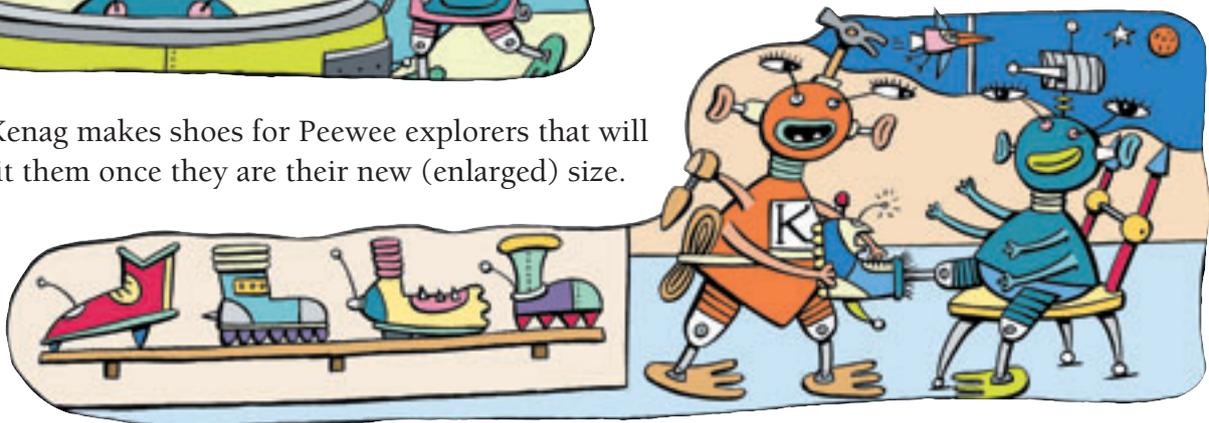
Each explorer chooses a new height and tells Kenag what it will be. He then measures one of their shoes and calculates the length of their new shoes.
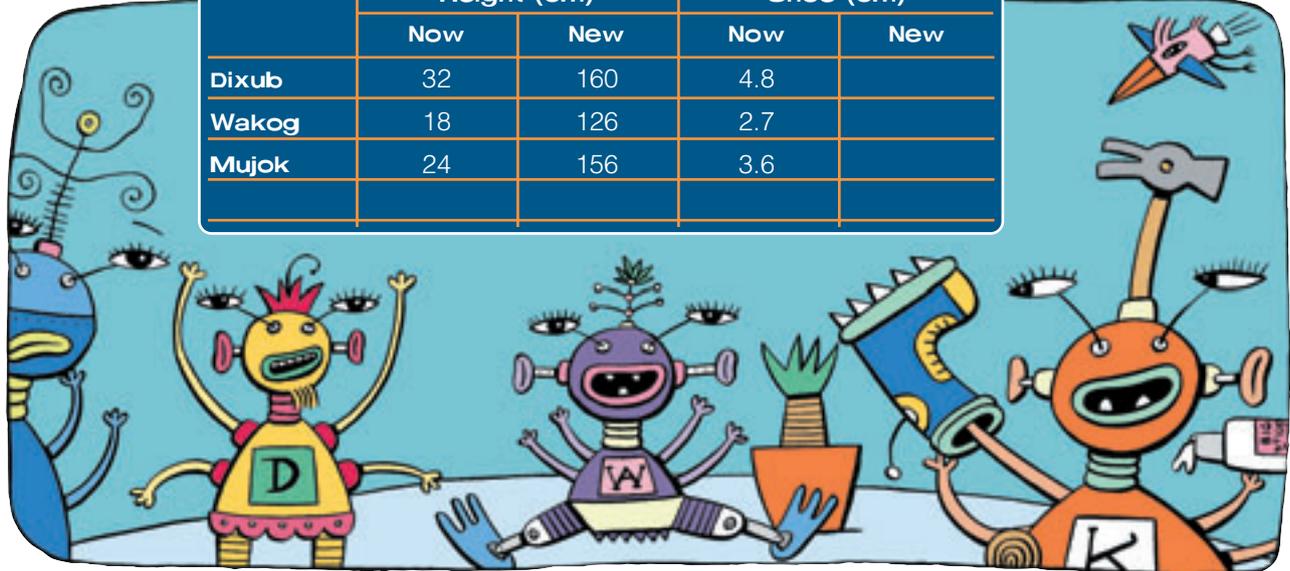
1. Rezel is 30 cm tall and her shoe length is 5 cm.
She wants to be 135 cm tall.

30 cm

5 cm
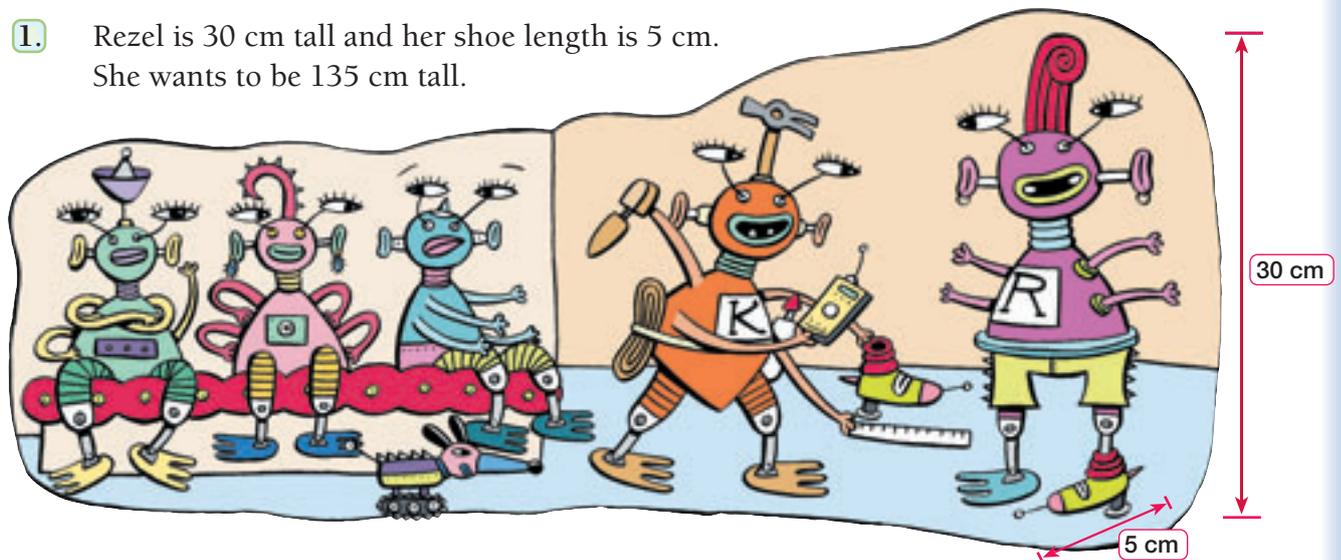
What size shoe does Kenag have to make for Rezel?

Using ratios to increase and decrease lengths

2. **a.** What size shoes should Kenag make for Dixub, Wakog, and Mujok?
Copy and complete the table.

	Height (cm)		Shoe (cm)	
	Now	New	Now	New
Dixub	32	160	4.8	
Wakog	18	126	2.7	
Mujok	24	156	3.6	

b. Invent your own aliens and their details.
Add them to your table, and work out the missing lengths.
Ask a classmate to check your working.

3. **a.** Kenag has made shoes for Pifal and Vazom, but neither can remember the height they wanted to be.
Copy and complete the table.

	Height (cm)		Shoe (cm)	
	Now	New	Now	New
Pifal	28		4.2	16.8
Vazom	19		2.5	15
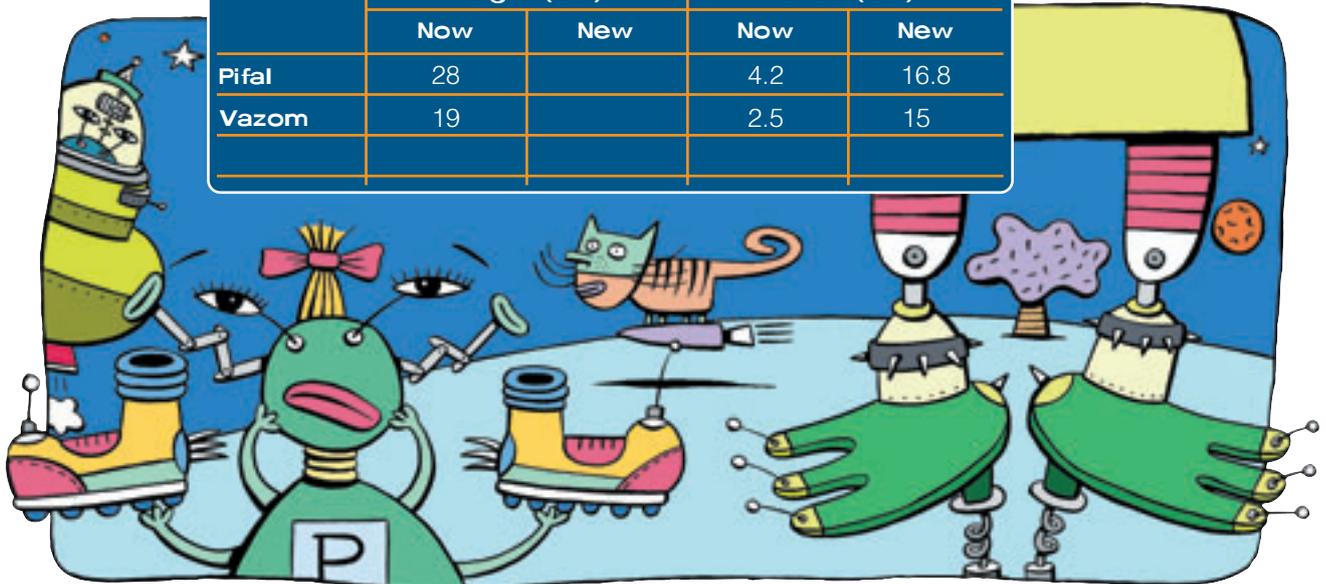
b. Invent your own aliens and their details.
Add them to your table, and work out the missing heights.
Ask a classmate to check your working.

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