

Family Feast

ACTIVITY

Awatea and her family are travelling round the South Island on holiday. They arrive in a small town in South Canterbury and decide it's time for dinner.

Here's a good place to stop for a meal. They have a fixed price for 3 courses.

Cosy Café	
3 courses – just \$17.50	
Starters	Tomato soup Seafood cocktail
Mains	Fish Porterhouse steak Chicken
Desserts	Ice cream Mud pie Apple pie

Oh, Dad. There's not much choice. We'll all have to have the same thing.

You're wrong, Awatea. Even though there are 6 of us, we can each have a different meal.

1. Is Mum right? Explain your answer. You could use a diagram.
2. List all the different possibilities. How many different combinations are there?
3. On Sundays, the Cosy Café also offers garlic bread as one of the starters. How many combinations can you find now?
4. If the Cosy Café offered 3 starters, 4 main meals, and 3 desserts, how many different combinations would there be?
5. If the Cosy Café had 11 different dishes on the menu, how should they group them to offer the greatest possible number of combinations? (That is, how many should be starters, mains, and desserts?)