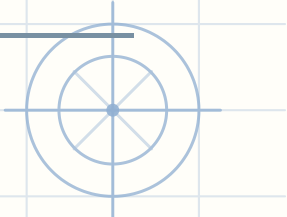


Jug puzzles — Jugs to 25L

Name: _____

Date: _____



A step = fill a jug, empty a jug, or pour one into the other. Show the order.

- 1 You have an 11L jug, a 24L jug, and a tap. Neither jug has any markings.

What is the fewest steps that leave exactly 22L in a jug?

Steps fill the 11L jug → pour the 11L jug into the 24L jug → fill the 11L jug → pour the 11L jug into the 24L jug — the 22L is now in the 24L jug. That is 4 steps.

4

- 2 You have a 3L jug, an 18L jug, and a tap. Neither jug has any markings.

What is the fewest steps that leave exactly 6L in a jug?

Steps

.....

.....

.....

- 3 You have a 7L jug, a 12L jug, and a tap. Neither jug has any markings.

What is the fewest steps that leave exactly 3L in a jug?

Steps

.....

.....

.....



Jug puzzles · Jugs to 25L — Answer key

If they are stuck

- How many different things can you actually DO? Write the list — it is shorter than it looks.

1. fill the 11L jug → pour the 11L jug into the 24L jug → fill the 11L jug → pour the 11L jug into the 24L jug — the 22L is now in the 24L jug. That is 4 steps.

3. fill the 12L jug → pour the 12L jug into the 7L jug → empty the 7L jug → pour the 12L jug into the 7L jug → fill the 12L jug → pour the 12L jug into the 7L jug → empty the 7L jug → pour the 12L jug into the 7L jug — the 3L is now in the 12L jug. That is 8 steps.

2. fill the 3L jug → pour the 3L jug into the 18L jug → fill the 3L jug → pour the 3L jug into the 18L jug — the 6L is now in the 18L jug. That is 4 steps.

