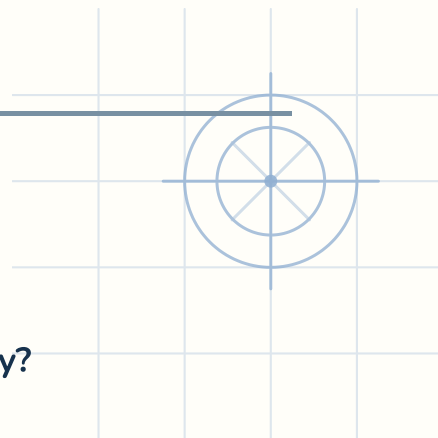


Coin puzzles — Up to 70c

Name: _____

Date: _____



Find the fewest coins. Show which coins they are.

- 1 The town of Marrow mints just three coins: 1c, 3c, 4c.
A loaf costs 18c. What is the fewest coins that pay it exactly?

Why

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- 2 On the island of Tern the only coins are 1c, 10c, 12c.
A ferry ticket costs 66c. What is the fewest coins that pay it exactly?

Why

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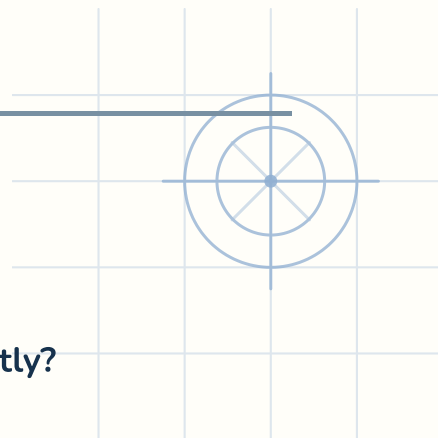
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Coin puzzles — Up to 70c

Name: _____

Date: _____



(Find the fewest coins. Show which coins they are.

- 3** A machine takes only 1c, 4c, 9c tokens and gives no change.
A ride costs 61c. What is the fewest tokens that pay it exactly?

Why

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- 4** A market on Tern gives no change, and its coins come in 1c, 10c, 14c only.
A basket comes to 63c. What is the fewest coins that pay it exactly?

Why

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Coin puzzles · Up to 70c — Answer key

If they are stuck

- The way everybody pays is not the answer here. Try it anyway, then ask what it wasted.

1. $4 + 4 + 4 + 3 + 3$ — 5 coins. Taking the biggest coin first gives $4 + 4 + 4 + 4 + 1 + 1$, which is 6 coins.

3. $9 + 9 + 9 + 9 + 9 + 4 + 4 + 4 + 4$ — 9 tokens. Taking the biggest token first gives $9 + 9 + 9 + 9 + 9 + 9 + 4 + 1 + 1 + 1$, which is 10 tokens.

2. $12 + 12 + 12 + 10 + 10 + 10$ — 6 coins. Taking the biggest coin first gives $12 + 12 + 12 + 12 + 12 + 1 + 1 + 1 + 1 + 1 + 1$, which is 11 coins.

4. $14 + 14 + 14 + 10 + 10 + 1$ — 6 coins. Taking the biggest coin first gives $14 + 14 + 14 + 14 + 1 + 1 + 1 + 1 + 1 + 1 + 1$, which is 11 coins.

