



# Summertopia

The country of Summertopia has a different money system than we do. In our system \$1.00= 100 cents, but in Summertopia's system 1 tog=60 fleeps.

The togs are made of paper, but all the variations of fleeps are coins. Here is a list of what the various Summertopia coins are called:

- 1 fleep= 1 flenny
- 5 fleeps = 1 flickle
- 10 fleeps = 1 flime
- 20 fleeps = 1 flerd
- 30 fleeps = 1 flalf

1. Here is a list of tog fractions, and how many fleeps each fraction is worth. We have filled in two of the rows; you are to fill in the rest.

$$1/60 \text{ tog} = 1 \text{ fleep}$$

$$1/12 \text{ tog} = \underline{\hspace{4cm}}$$

$$1/6 \text{ tog} = 10 \text{ fleeps, or 1 flime}$$

$$1/3 \text{ tog} = \underline{\hspace{4cm}}$$

$$1/2 \text{ tog} = \underline{\hspace{4cm}}$$

2. In Summertopia, a soda costs 75 fleeps. List a combination of togs and fleep coins that you could use to pay for your soda.

Now list another combination, **using just coins**.

- 3.a.** Suppose you had only 2 togs to pay for your 75-fleep soda. How much change would you get back?
- b.** You find that fleeps are heavy to carry, so you ask the store owner to give you the least possible number of fleeps for your change. What combination of coins would this be?
- 4.a.** You and your mother are holding the same **value** of fleeps in your hands, but you are holding two of the same kinds of coins and she is holding only one. What coins could you each be holding?
- b.** Is there another way that you could hold two coins while your mother holds just one that would produce the same value? Explain your answer.

**Extension:**

You read a newspaper article that says Summertopia is changing their money system, and has decided to eliminate one coin. This is of interest to you because you are a travel agent who sends a lot of clients to Summertopia. Several of your clients have found the money system confusing, so you decide to write a letter to the Secretary of the Treasury of Summertopia. What coin, if any, would you suggest that they eliminate from their money system? Remember to support your ideas with a strong explanation.