Problem 4: Multistep with money


Money is a common multistep problem that tends to pop up regularly on NAPLAN. It is also a very easy way to introduce algebra or fractions in a meaningful way. Here's a problem that I enjoy using with anyone from years 3-9. It is really easy to vary to create complexity. Check out the variations below.
I'm going shopping. I buy a cupcake for $\$ 3$, a shirt for
$\$ 10$ and then at the end of the day 1 have $\$ 10$ left.
What did I start with?
Variations:

- What if I had bought cakes for myself and my three friends for \$3 each? What did I start with now? What if the fourth one was free?
- What if I had also bought a skirt for $\$ 20$ ?
- What if I bought a second skirt but it was $50 \%$ off?
- What if during the day my sister had paid me back $\$ 10$ that she owed me? I still ended the day with $\$ 10$.
- What if I had only started the day with $\$ 5$ ? I used a credit card for the rest. What was my credit card balance at the end of the day?

