On thinking fast and slow

A bat and a ball together cost 1.1 dollars. The bat costs 1 dollar more than the ball.

What is a dollar? We all know what a dollar is ... because it is denoted by the symbol \$. TEACHER, WHAT IS A DOLLAR?

...

$$\begin{cases} 1.1\$ = P_{Bat} + P_{Ball} \\ P_{Bat} - P_{Ball} = 1 \$ \end{cases}$$

$$\begin{cases} P_{Bat} + P_{Ball} = 1.1\$ \\ P_{Bat} - P_{Ball} = 1\$ \end{cases}$$

:.

$$\begin{pmatrix} P_{Bat} & P_{Ball} \\ P_{Bat} & P_{Ball} \end{pmatrix} \begin{pmatrix} 1 \\ -1 \end{pmatrix} = \begin{pmatrix} 1 \\ -1 \end{pmatrix}$$

NO ANSWER THIS WAY

:.

$$P_{Bat} = 1\$ + P_{Ball}$$

AND

$$1.1\$ = 1\$ + P_{Ball} + P_{Ball}$$

$$0.1\$ = 2P_{Ball}$$

$$P_{Ball} = 0.05$$
\$ TEACHER?