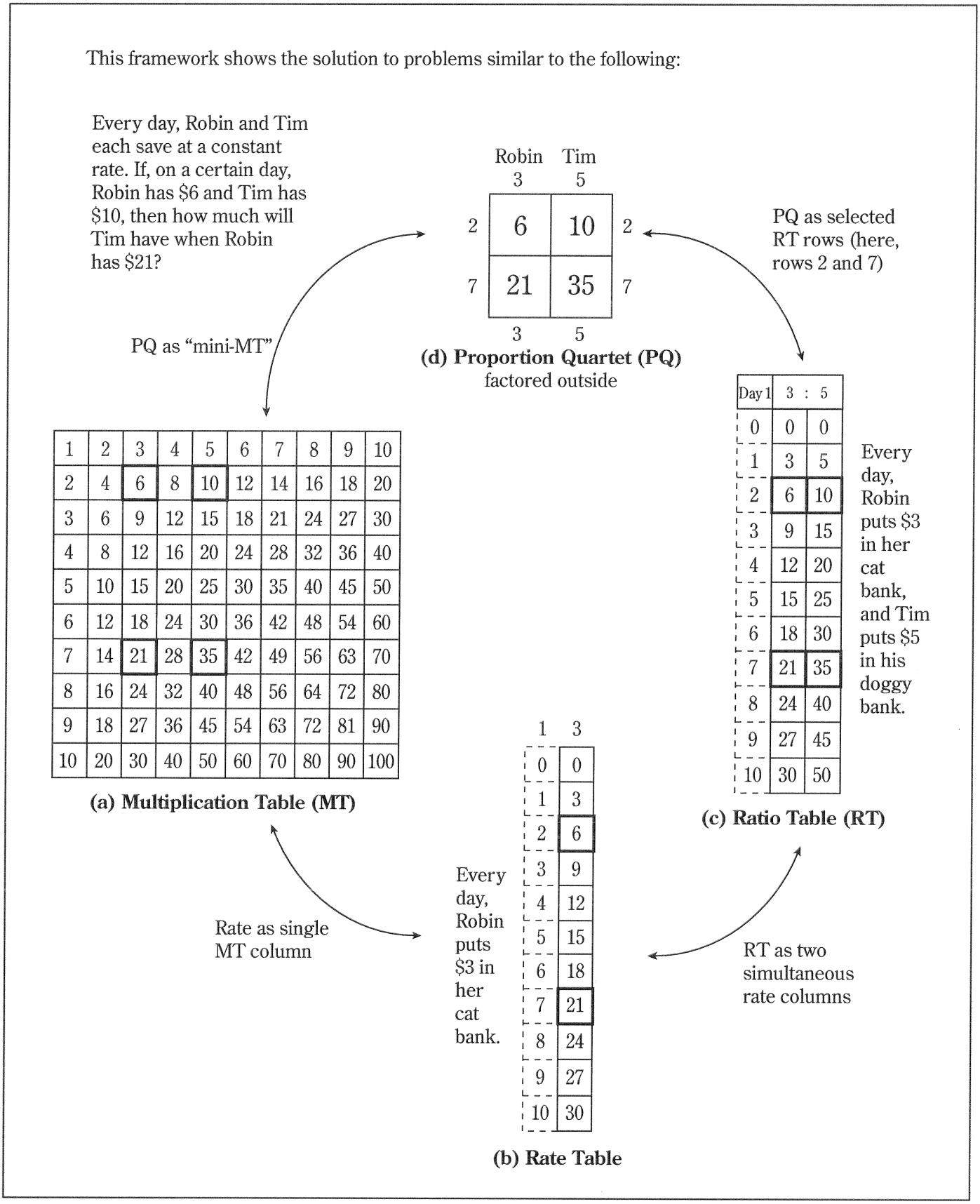

Fig. 1 Designed framework for conceptualizing ratio and proportion. From left and counterclockwise: (a) the multiplication table (MT), (b) rate table, (c) ratio table (RT), and (d) proportion quartet (PQ). Products and cells of a specific example problem on the top left are enhanced here for illustration.