PARTIAL QUOTIENT DIVISION

One method of solving division problems is called partial quotient division. In this method, you figure out the quotient in parts. Let's see how it's done:

Jason has $537 in his savings account. He is going to use it to buy presents for the 8 people in his family. If he wants to spend an equal amount on each person, how much will he be spending per person?

You can find the amount Jason can spend by solving 547 ÷ 8.

partial quotients

$$8 \overline{)547}$$
$$- 320$$
$$\overline{227}$$
$$- 160$$
$$\overline{67}$$
$$- 64$$
$$\overline{3}$$

40

20

8

1. Think of an amount you could definitely make groups of. It's helpful to use round or easily multiplied #s, e.g., 10, 20, 25, 30…

2. Figure out how much would be "used" if you made groups of that #.

3. Subtract that amount to find out how much is still left to divide.

4. Think of an amount you still could definitely still make groups of, figure out how much would be "used", and subtract that amount.

5. Repeat until you can't make any more complete groups.

6. Add the partial quotients, check if you have a reminder, and you have your final answer!

547 ÷ 8 = 68 r 3 ← 68 = 40 + 20 + 8

Jason can spend $68 on each person, leaving $3 left over.