



1) a) $408 \div 4 = 102$

$408 \div 4 = 102$

$400 \div 4 = 100$ $8 \div 4 = 2$

c) $565 \div 4 = 141r1$

$565 \div 4 = 141r1$

$400 \div 4 = 100$ $5 \div 4 = 1r1$

$160 \div 4 = 40$

b) $637 \div 3 = 212r1$

H	T	O	R
100	10	1	1
100	10	1	1
100	10	1	1

$637 \div 3 = 212r1$

$600 \div 3 = 200$ $7 \div 2 = 2r1$

$30 \div 3 = 10$

2) a) $648 \div 2 = 324$ b) $999 \div 3 = 333$

c) $848 \div 8 = 106$ d) $896 \div 4 = 224$

3) a) Apples: 70 trays of apples (1 left over)
Pears: 124 trays of pears
Plums: 88 trays of plums (4 left over)

b) 5 (1 apple and 4 plums)

1) The statement is sometimes true, depending on the number. If the number contains a place holder, like $208 \div 4$, then it will only need to be partitioned into two parts (200 and 8) to be divided because there are no tens to divide. The two division calculations would be $200 \div 4 = 50$ and $8 \div 4 = 2$. However, if all three digits have a value, then the number would need to be partitioned into 3 parts. For example, $933 \div 3$ would be calculated by partitioning 933 into 900, 30 and 3 and then dividing each part by 3, giving the final answer of 311.

2) a) $648 \div 2 = 324$ b) $999 \div 3 = 333$ c) $848 \div 8 = 106$ d) $896 \div 4 = 224$
 $648 \div 2$ equals 324, making it the closest answer to 300. It is only 24 away from 300 whereas the other calculations are considerably further away.

3) Similarities:

Both children have used a part-whole model.
Both children have used flexible partitioning.
Both part-whole models have three parts.
Both children have calculated the same correct answer of 141r5.
Both children have included the calculation $700 \div 7 = 100$ in their method.

Differences:

The children have flexibly partitioned 992 in different ways.
Mateus has partitioned 292 into 280 and 12.
Olivia has partitioned 292 into 210 and 82.

Accept any other similarities or differences that can be justified with reference to the part-whole models.

1) Type of Box	Number of Cupcakes per Box	Total Number of Full Boxes	Number of Cupcakes Left Over
	3	226	1
	4	169	3
	5	135	4
	6	113	1
	7	97	0
	8	84	7

2) Twinkl bakery should package the cupcakes into boxes of 7 as there would be none left over. This way, they would avoid waste and make more profit.
 $679 \div 7 = 97$

