Pythagoras’s Challenge Sheet – Division… and maybe more!

You think you’re up to it? Do you? We’ll see… Here are some mixed up problems for you to work through. Hint: Does your answer actually answer the question? Read your answer directly after reading the question to see.

1. Alex has 22 bags of apples. In each bag there are 7 apples. She shares them equally amongst her 8 friends. How many apples do they each have? Are there any apples left over?
2. A packaging factory has 9321 eggs. In each box you can fit 8 eggs. How many boxes do they need?
3. A massive seated concert is taking place. The chairs in the hall have to be put into rows of 6. There are 27,689 chairs. How many rows will there be? Will there be any chairs left over – can you predict this before you do your calculation? How?
4. Apple juice cartons are sold in boxes of 12 in the supermarket. The supermarket’s computer says they have 5234 cartons left to sell. How many boxes is that?



1. What is wrong with this calculation:
2. What are the missing numbers:
3. What is the product of 19 and 3.6?
4. What is 0.36 x 12.8 ?
5. The school buys 820 new books, which are put onto new bookshelves. If there are 34 books on each shelf, how many shelves must Mrs Mercer put up?
6. Small peaches 15p ; Large peaches 25p. Emily has £5 to spend on peaches. She decides to buy **only** small peaches or **only** large peaches. How many more small peaches than large peaches can she buy for £5?
7. Mr Pearce shows limited willpower and eats 17 biscuits every day in 2015. How many biscuits will Mr Pearce have eaten by the end of the year?
8. 50 ÷ ? = 2.5
9. Cheddar cheese costs £7.50 for 1kg. Marie buys 200 grams of cheddar cheese. How much does she pay?
10. Put brackets into this expression to make it correct.

 102  ÷ 10 ÷ 10 ÷ 10 ÷ 10 = 10

1. There are 60g of rice in **one** portion. How many portions are there in a 3kg bag of rice?