Weekly Quiz

Questions:

Week 7 – Solutions to the maths office by Thursday 21st October

1. Every day this June I picked 300 g of raspberries from my garden. How many kg was that in total?

2. What is the largest amount of money one can have in 1p, 2p, 5p and 10p coins and still not be able to make exactly 20p?

3. Four lamp posts are in a straight line. The distance from each post to the next is 25m. What is the distance from the first post to the last?

4. Clearing up after a party, I found two bottles of pop which were full, two which were one third full and two which were one third empty, two which were half full and two which were completely empty. I poured the contents to make up full bottles. How many did I have altogether?

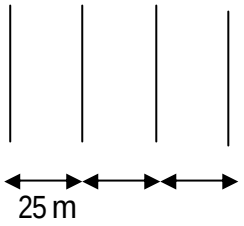
5. Samantha bought seven super strawberry swizzles and ten tongue twisting toffees for £1.43. Sharanpal bought five super strawberry swizzles and ten tongue twisting toffees for £1.25. How much does a tongue twisting toffee cost?

6. A cylindrical can just contains three tennis balls, stacked one above the other. Find the ratio of the height of the can to the circumference of the can?

Weekly Quiz

Solutions:

Week 7 – 21/10/04

1. June has 30 days. 30 × 300 = 9000 g = 9 kg in total
2. 10, 5, 2, 2, 2, 2 still can not make exactly 20p total 23p
3. 

   Therefore 75 m from first to last post.

4. $1+1+\frac{1}{3}+\frac{1}{3}+\frac{2}{3}+\frac{2}{3}+\frac{1}{2}+\frac{1}{2}=5$ bottles in total

5. s = super strawberry swizzles, t = tongue twisting toffees

   7s + 10 t = 143 and 5s +10t = 125 therefore 2s = 18, s = 9.

   This means that t = 8 pence

6. Circumference of can = $2p$ r
   Height of can = 6 r
   Therefore ratio of height : circumference
   $6\,r : 2p\,r$
   $3 : p$