Year 5 and 6 Problem Solving

- Q1. Stuart went to the Newtown market fair and bought 3 coffee mugs at \$1.67 each, a T-shirt for \$7.95 and 4 second hand books at 35 cents each. How much change is left over from \$20.00?
- Q2. Anne gets paid \$31.75 for 5 hours baby sitting. How much would she earn for
 - (a) 1 hour of baby sitting?
- (b) 7 hours of baby sitting?
- Q3. 7 shirts cost \$128.45. What is the cost of (a) 1 shirt (b) 10 shirts
- Q4. Gloworm washing powder comes in 3 different sizes: 500 g at \$1.49, 1 kg at \$2.88, 2 kg at \$5.80 Which is the best buy?
- Q5. Find two numbers which multiply to give 24, and at the same time the numbers must also add up to give 11.
- Q6. Jane is 5 years older than Tom. Three times Jane's age plus twice Tom's age is 35. What are the ages of Jane and Tom?
- Q7. Try to find a quick method of working out these totals:
 - (a) 6+8+10+12+6+8+10+12+6+8+10+12+6+8+10+ 12+6+8+10+12
 - (b) The sum of all the even numbers up to 100
 - $2 + 4 + 6 + 8 + 10 + \dots + 94 + 96 + 98 + 100$
- Q8. The area of a certain rectangle is 10 cm². If the length and breadth is now tripled (made 3 times bigger), what is the area of the larger rectangle?
- Q9. With the help of a tree diagram, write down the 12 different ways you can arrange 2 letters from A, B, C and D without repeating letters. Note that AB is a different arrangement from BA.
- Q10. If I think of a number, multiply it by 9 and then subtract 2, then I am left with 34. What is the number that I first thought of?
- Q11. Greg is 8 years younger than Sam. Andrew is 17 years older than Greg. If Andrew is 42, how old is Sam?