

DEPARTMENT OF MATHEMATICS

PROBLEM SOLVING CHALLENGE

Q1. <u>Junior Cycle</u>

You are by a lake with a 7-litre and a 5-litre bucket. How do you measure out six litres in the <u>fewest possible</u> pourings?



Q2. <u>Senior Cycle</u>

Niall makes regular monthly instalments of €550 into his bank for 6 years. For the first three years the bank offers him an AER of 4.5%. For the remaining years the bank offers him an AER of 4%. Find how much money Niall has saved at the end of these 6 years.

Hint:
$$\sum_{x}^{y} T_{n} = \sum_{1}^{y} T_{n} - \sum_{1}^{x} T_{n}$$

Answers on an A4 sheet with your <u>Name</u>, <u>Year</u> and <u>Class</u> should be given to Mr. McEvoy in room 33 before 4pm on Thursday 31st of January.

Monthly Prize for both Junior and Senior Cycle.*