Maths Revision Worksheet: Paper I Number

1. I know that **Natural Numbers N** are the set of whole positive numbers 1,2,3,...

   I know that **Integers Z** are the set of whole positive and negative numbers -2,-1,0,1,2...

   I know that **Rational Numbers (or fractions) Q** are numbers that can be written in the form a/b where a,b €

   I know that Irrational Numbers are non-repeating, non ending decimal numbers and that √2, √4 and ∏ are examples of irrational numbers

   I know how to evaluate if a number is irrational or not by following the example below or by using the **S-D** button on my calculator:
   Find if 5.2 is a rational number **Type 5.2 = S-D If display shows a fraction...it's rational**
   Find if .3333 is a rational number **Type .3333 = S-D If display show fraction ...rational**
   Find if √2 is a rational number **Type √2 = S-D** If no fraction displayed ..irrational

   Ex 1 Pg 187
   2012 Q2a and b
   Mock 2015 Q2b

2. I know that N is a subset of Z and that Z is a subset of Q and that Natural, Integers, Rational and irrational numbers are all **Real Numbers R**
   SP5 Q3b

3. I know that the **Perfect Squares** 4,9,16,25,36...are the product of equal integers.

4. I know that a **Prime Number** is a number has only 2 factors, itself and 1.
   The first 5 prime numbers are 2,3,5,7,11
   SP2 Q4a
   SP5 Q3a

5. I know how to Set/Reset my Calculator to
   Calculator Mode MODE [1]

6. I know how to find the prime factors of any number by repeatedly dividing that number by prime numbers from the above list AND/OR with my calculator using the **FACT** key

i.e **720 = SHIFT FACT = 2^4 X 3^2 x 5**
Mock 2015 Q2a

7. I know how to set up and display a number like 149597871 in **Scientific Notation/Standard Form a x 10^n** on my calculator to 2 significant figures by
Typing 149597871 SHIFT MODE [7] [2] = $1.5x10^8$
2013 Q3a
Mock 2015 Q2c
2014 SP Q1b
8. I know how to use the **EXP** or **$x10^x$ key** on my calculator. (Pg 130)
SP2 Q3a

9. I know how to set my calculator to **round and display numbers to 2 significant figures** by typing
1234563.3456 SHIFT MODE [6] [2] = S-D 234563.35
2013 Q3b
2013 Q4a

10. I know how to add/subtract as well as multiply/divide numbers given in Scientific Notation.
Ex 1 Pg 130