S1 Yellow Homework 1

1.) First 5 multiples of 7 are:

$$7, 14, 21, 28, 35$$

2.) (72)

1	72
2	36
3	24
4	18
6	12
8	9

Factors of 72 are 1,2,3,4, 6, 8, 9, 12, 18,24,36,72

3.) Multiples of 8 are: 8, 16, 24, 32, 40, ...

Multiples of 5 are: 5, 10, 15, 20, 25, 30, 35, 40, ...

LCM of 8 and 5 is 40

4.) (16)   (20)

1	16	1	20
2	8	2	10
4	(4)	(4)	5

HCF of 16 and 20 is 4

5.) First 5 prime numbers are:

$$2, 3, 5, 7, 11$$

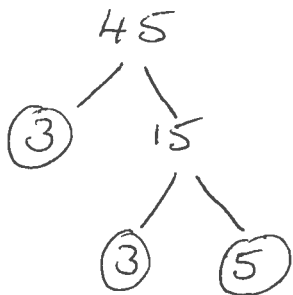6.) First 5 square numbers are:

$$1, 4, 9, 16, 25$$

7.) First 5 cubic numbers are:

1, 8, 27, 64, 125

8.) First 5 triangular numbers are:

1, 3, 6, 10, 15

9.)

45
3   15
   3   5

The prime factors of 45 are 3 and 5

10.) a) 30,042,050 − 2,670,084

$$
\begin{array}{r}
\overset{2}{3}\overset{9}{0},\overset{9}{0}\overset{1}{4}\overset{9}{2},\overset{14}{0}5\overset{}{0} \\
-\quad 2,670,084 \\
\hline
27,371,966
\end{array}
$$

b) 340 × 6000

= 204 × 10000

= 2040,000

→ $\begin{array}{r} 34 \\ \times 6 \\ \hline 204 \end{array}$

c) 2680 ÷ 4000

= 268 ÷ 400

= 2.68 ÷ 4

= 0.67

→ $\begin{array}{r} 0.67 \\ 4\overline{\smash{)}2.^{2}6^{2}8} \end{array}$

d) 76 × 38

= 2,888

=> $\begin{array}{r} 76 \\ \times 3_48 \\ \hline 6_08 \\ +2280 \\ \hline 2888 \end{array}$

e) 465 ÷ 37

= 12 r11

$\begin{array}{r} 12\ r11 \\ 37\overline{\smash{)}465} \\ -370 \quad 10 \\ \hline 95 \\ -74 \quad 2 \\ \hline 11 \end{array}$

f) $\sqrt{810\,000}$

$= \underline{\underline{900}}$

g) $\sqrt[3]{27\,000}$

$= \underline{\underline{30}}$

h) 2^4

$= 2 \times 2 \times 2 \times 2$

$= \underline{\underline{16}}$

i) $4 \times \left[(20 - 5 \times 2)^2 \div 50 \right] - 2^3$

$= 4 \times \left[(20 - 10)^2 \div 50 \right] - 2^3$

$= 4 \times \left[10^2 \div 50 \right] - 2^3$

$= 4 \times \left[100 \div 50 \right] - 8$

$= 4 \times 2 - 8$

$= 8 - 8$

$= \underline{\underline{0}}$