# MATHECINE ACADEMY 

## QUIZ \#1 <br> PRIMES, PRIME FACTORISATION, SQUARES, CUBES AND ROOTS

$\qquad$ DATE: $\qquad$ CLASS: $\qquad$ SCORE:
/ 15

1. Write down the prime numbers between 30 and 60 .
Answer:
2. Is the number 1547 prime or composite?

Show your working/explanation.

> Answer:
3.
(a) Cross out the numbers which are NOT squares nor cubes.

$$
\begin{array}{llll}
2^{2} \times 3^{3} \times 5^{5} & 5^{3} \times 2^{3} & 2^{3} \times 5 & 1 \\
2^{2} \times 5^{2} \times 7^{2} & 2^{8} & 3^{6} & 64
\end{array}
$$

(a) Using factor tree or the decomposition method, express (in index form) the number 63504 as the product of its prime factors.
Answer: ..... [3]
(b) Write down the square root in of 63504 , in index form.

Answer:
(c) If 63504 is multiplied by a number $m$, it becomes a perfect cube number. Give a possible value of $m$.

