1. Prime numbers have no "leaves" on their prime factor "tree".
(a) Complete the prime factor trees below:-

(b) Complete the list of prime numbers $\qquad$ 3, $\qquad$ 7, .....
(c) Complete this table about the prime numbers up to 30

| Range of numbers | Odd prime | Odd NOT prime | Even prime | Even NOT prime |
| :---: | :--- | :--- | :--- | ---: |
| 1 to 10 |  | 1 |  |  |
| 11 to 20 |  |  |  | 20 |
| 21 to 30 | 23,29 | $21,25,27$ |  | $22,24,26,28,30$ |

1 is not a prime number because mathematicians like to write as little as possible, and they got fed up of saying things like ... all primes (except one) and ... a product of prime numbers ( 1 is not allowed). So they decided 1 shouldn't be called a prime number.

Some people like to learn the prime numbers and some people like to learn that 2 is a prime number and which odd numbers are not prime. Which do you think will be easier for you? Answers

lb) List of prime numbers up to 30 are $2,3,5,7,11,13,17,19,23,29$

| Range of numbers | Odd prime | Odd NOT prime | Even prime | Even NOT prime |
| :---: | :--- | :--- | :--- | :--- |
| 1 to 10 | $3,5,7$ | 1,9 | 2 | $4,6,8,10$ |
| 11 to 20 | $11,13,17,19$ | 15 |  | $12,14,16,18,20$ |
| 21 to 30 | 23,29 | $21,25,27$ |  | $22,24,26,28,30$ |

2. Here is a list of numbers.

$$
\begin{array}{lllllllll}
7 & 9 & 14 & 15 & 21 & 27 & 33 & 35 & 45
\end{array}
$$

From the numbers in the list, write down a prime number.
2. ...............
3. Here is a list of numbers.
$\begin{array}{lllllllll}2 & 12 & 14 & 16 & 22 & 26 & 32 & 64 & 169\end{array}$
From the numbers in the list, write down the prime number.
3. ...............
4. Here is a list of numbers.
$\begin{array}{llllllll}9 & 19 & 20 & 21 & 25 & 27 & 35 & 45\end{array}$
From the numbers in the list, write down a prime number.
4.
5. Here is a list of numbers.

$$
\begin{array}{lllllllll}
9 & 10 & 12 & 14 & 17 & 100 & 120 & 125 & 240
\end{array}
$$

From the numbers in the list, write down a prime number.
$\qquad$
6. Here is a list of numbers.

$$
\begin{array}{lllllllll}
5 & 6 & 8 & 20 & 27 & 35 & 36 & 50 & 65
\end{array}
$$

From this list, write down the prime number.
6. ...............
7. Here is a list of numbers.

$$
\begin{array}{llllllll}
2 & 9 & 10 & 12 & 15 & 20 & 27 & 40
\end{array}
$$

From the numbers in the list, write down the prime number.
7. ...............

Answers 2) $7 \quad 3) 2 \quad 4) 19 \quad$ 5) $17 \quad 6) 5 \quad$ 7) 2

