

Actividad #8

1. $\text{mcd}(254, 32)$

$$\begin{array}{r} 254 \\ 32 \end{array} = 7 \frac{15}{16} \rightarrow 254 = 7 \cdot 32 + 30$$

$$\begin{array}{r} 32 \\ 30 \end{array} = 1 \frac{1}{15} \rightarrow 32 = 1 \cdot 30 + 2$$

$$\begin{array}{r} 30 \\ 2 \end{array} = 15$$

$$30 = 15 \cdot 2 + 0$$

$$\text{mcd} = 2$$

2. $\text{mcd}(74, 383)$

$$\begin{array}{r} 383 \\ 74 \end{array} = 5 \frac{13}{74} \rightarrow 383 = 5 \cdot 74 + 13$$

$$\begin{array}{r} 74 \\ 13 \end{array} = 5 \frac{9}{13} \rightarrow 74 = 5 \cdot 13 + 9$$

$$\begin{array}{r} 13 \\ 9 \end{array} = 1 \frac{4}{9} \rightarrow 13 = 1 \cdot 9 + 4$$

$$\begin{array}{r} 9 \\ 4 \end{array} = 2 \frac{1}{4} \rightarrow 9 = 2 \cdot 4 + 1$$

$$\begin{array}{r} 4 \\ 1 \end{array} = 4$$

$$4 = 4 \cdot 1 + 0$$

$$\text{mcd} = 1$$

3. $\text{mcd}(7544, 115)$

$$\begin{array}{r} 7544 \\ 115 \end{array} = 65 \frac{3}{5} \rightarrow 7544 = 65 \cdot 115 + 69$$

$$\begin{array}{r} 115 \\ 69 \end{array} = 1 \frac{46}{69} \rightarrow 115 = 1 \cdot 69 + 46$$

$$\begin{array}{r} 69 \\ 46 \end{array} = 1 \frac{23}{46} \rightarrow 69 = 1 \cdot 46 + 23$$

$$\begin{array}{r} 46 \\ 23 \end{array} = 2$$

$$46 = 2 \cdot 23 + 0$$

$$\text{mcd} = 23$$

4. $\text{mcd}(687, 24)$

$$\begin{array}{r} 687 \\ 24 \end{array} = 28 \frac{5}{8} \rightarrow 687 = 28 \cdot 24 + 15$$

$$\begin{array}{r} 24 \\ 15 \end{array} = 1 \frac{3}{5} \rightarrow 24 = 1 \cdot 15 + 9$$

$$\begin{array}{r} 15 \\ 9 \end{array} = 1 \frac{6}{9} \rightarrow 15 = 1 \cdot 9 + 6$$

$$\begin{array}{r} 9 \\ 6 \end{array} = 1 \frac{1}{2} \rightarrow 9 = 1 \cdot 6 + 3$$

$$\begin{array}{r} 6 \\ 3 \end{array} = 2$$

$$6 = 2 \cdot 3 + 0$$

$$\text{mcd} = 3$$