Snippet definitions

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```
egin{aligned} \mathbf{mpfdef} \ \mathbf{type\text{-}synonym} \ \mathit{mpf} = \mathit{float} \times \mathit{float} \ \mathit{list} \ \end{aligned} egin{aligned} \mathbf{typmpf} \ \end{aligned}
```

MPF.mpf

```
\begin{array}{l} \mathbf{approxdef} \\ \mathbf{fun} \ approx :: mpf \Rightarrow float \ \mathbf{where} \\ approx \ (a,\ es) = a \end{array}
```

constapprox

approx

IEEE *IEEE*

 $\mathbf{HOLreal} \quad \mathit{real}$

1 Primary and secondary style

This is the primary style. $float = \{real\text{-}of\text{-}int\ m*2\ powr\ real\text{-}of\text{-}int\ e\ | m\ e.\ True\}$

This is the secondary one. $float = \{real\text{-}of\text{-}int\ m*2\ powr\ real\text{-}of\text{-}int\ e\ | m\ e.\ True\}$

2 Test snippets

float def

```
\label{eq:definition_float} \begin{split} & \text{definition } \textit{float} = \{\textit{real-of-int } m * \textit{2 powr real-of-int } e \mid m \ e. \ \textit{True} \} \\ & \textbf{definition } \textit{float'} = \{\textit{real-of-int } m * \textit{2 powr real-of-int } e \mid m \ e. \ \textit{True} \} \end{split}
```

float type

IEEE.float

float typeof

 $real\ set$

float typ

IEEE.float

\mathbf{MLreal}

real

prf

```
\mathbf{prft}
```

?

 $\begin{array}{l} \textbf{TestSnippet} \\ \textbf{definition} \ \textit{ym} = \textit{Plus-zero} \end{array}$