

```
In[1]:= Quiet[Remove["Global`*"], {Remove::rmnsm}]; Print["Mathematica $Version = ", $Version, ""]; Print["Execution started at = ", DateString[DateList[], {"Hour", ":", "Minute", " on ", "DayNameShort", " ", "Day", " ", "MonthNameShort", " ", "Year"}]];
```

```
Mathematica $Version = "9.0 for Mac OS X x86 (64-bit) (January 24, 2013)"
```

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Execution started at = 22:41 on Thu 01 Mar 2018
```

```
In[2]:= (* http://en.wikipedia.org/wiki/List_of_aspect_ratios_of_national_flags#cite_note-Nepal-66 *)
(* http://en.wikipedia.org/wiki/Talk:List_of_aspect_ratios_of_national_flags#Nepal *)
(* http://www.jdawiseman.com/2017/20171101_Nepal_flag_aspect_ratio.nb *)
(* http://www.jdawiseman.com/2017/20171101_Nepal_flag_aspect_ratio.pdf *)
```

```
In[3]:= nepalAspectRatio = 
$$\frac{24 + \left(\frac{297-180\sqrt{2}}{92-36\sqrt{2}}\right) \left(1 + \frac{8-3\sqrt{2}}{\sqrt{118-48\sqrt{2}-6}}\right)}{32 + \left(\frac{297-180\sqrt{2}}{92-36\sqrt{2}}\right) \left(1 + \frac{6}{(8-3\sqrt{2}) \left(\sqrt{1+\frac{18}{41-24\sqrt{2}}}-1\right)}\right)}$$
 // FullSimplify // ToRadicals
```

$$3 \left(40\,665\,857\,401\,448 + 2\,001\,055\,256\,793 \sqrt{2} + 144 \sqrt{17 (10\,411\,242\,561\,157\,458\,401 - 2\,208\,656\,823\,577\,139\,226 \sqrt{2})} \right)$$

```
Out[3]= 
$$\frac{3 \left( 40\,665\,857\,401\,448 + 2\,001\,055\,256\,793 \sqrt{2} + 144 \sqrt{17 (10\,411\,242\,561\,157\,458\,401 - 2\,208\,656\,823\,577\,139\,226 \sqrt{2})} \right)}{164\,926\,945\,077\,845}$$

```

```
In[4]:= N[nepalAspectRatio, 21]
```

```
Out[4]= 0.820337587768600846361
```

```
In[5]:= (* Previous done Wed 01 Nov 2017. "nepalAspectRatio//TeXForm" done Thu 01 Mar 2018. *)
```

```
In[6]:= PageWidth → PaperWidth; nepalAspectRatio // TeXForm
```

```
Out[6]/TeXForm= \frac{3 \left( 40665857401448+2001055256793 \sqrt{2}+144 \sqrt{17 \left( 10411242561157458401-2208656823577139226 \sqrt{2} \right)} \right)}{164926945077845}
```