

```
In[ ]:= c = "Canada";
a = CountryData[c, "Area"]
p = QuantityMagnitude[CountryData[c, "Population"]]
b = CountryData[c, "BoundaryLength"]
```

$$\frac{b}{\sqrt{a p}}$$

```
Out[ ]:=
```

9.98467 × 10⁶ km²

```
Out[ ]:=
```

37 742 157

```
Out[ ]:=
```

210 973. km

```
Out[ ]:=
```

0.0108679

```
In[ ]:= 37 742 157 people // FullForm
```

```
Out[ ]//FullForm=
```

Quantity[37 742 157, "People"]

```
In[ ]:= Exposure[c_] := Module[{
  a = CountryData[c, "Area"],
  p = QuantityMagnitude[CountryData[c, "Population"]],
  b = CountryData[c, "BoundaryLength"]
},
   $\frac{b}{\sqrt{a p}}$ 
]
```

```
In[ ]:= Sort[Exposure[#] → # & /@ Select[CountryData["Countries"],
  CountryData[#, "Population"] > Quantity[106, "people"] &]]
```

```
Out[ ]:=
```

{0.000311815 → China, 0.000313319 → India, 0.000355086 → Nigeria, 0.000468056 → Ethiopia, 0.000505266 → Egypt, 0.000565621 → United States, 0.000572313 → Brazil, 0.000589704 → Pakistan, 0.000669771 → Iran, 0.00070257 → Tanzania, 0.00071832 → Algeria, 0.000718361 → Kenya, 0.000742978 → Democratic Republic of the Congo, 0.0008211 → Uganda, 0.000855879 → Saudi Arabia, 0.00085978 → Mexico, 0.000884359 → Iraq, 0.000900848 → South Africa, 0.000920301 → Yemen, 0.00093907 → Sudan, 0.000949049 → Morocco, 0.000967131 → Ghana, 0.000976 → Bangladesh, 0.00101364 → Poland, 0.0010287 → Niger, 0.00105269 → France, 0.001062 → Angola, }

0.00109727 → Afghanistan , 0.00111423 → Germany , 0.00113052 → Sri Lanka ,
 0.00116003 → Russia , 0.0011798 → South Korea , 0.00119747 → Madagascar ,
 0.00121143 → Turkey , 0.00124292 → Ivory Coast , 0.00125017 → Colombia ,
 0.00127223 → Zimbabwe , 0.0012776 → Romania , 0.00128656 → Myanmar ,
 0.00129952 → Chad , 0.00132795 → Argentina , 0.0013337 → Burkina Faso ,
 0.00135046 → Thailand , 0.00135873 → Syria , 0.00140545 → Cameroon ,
 0.00140862 → Mozambique , 0.00141295 → Nepal , 0.00141576 → Spain ,
 0.00142713 → Vietnam , 0.00142945 → Ukraine , 0.00144528 → Mali ,
 0.00149422 → Guatemala , 0.00151697 → Peru , 0.00152341 → Zambia ,
 0.00152893 → Rwanda , 0.00153025 → Venezuela , 0.00160764 → Uzbekistan ,
 0.00168527 → Somalia , 0.00169201 → Taiwan , 0.00169316 → Burundi ,
 0.00170349 → Kazakhstan , 0.00173301 → Cambodia , 0.0017397 → Jordan ,
 0.00174719 → Senegal , 0.0017518 → Netherlands , 0.00175951 → Libya ,
 0.00179779 → Sierra Leone , 0.00180577 → Benin , 0.00183346 → Australia ,
 0.00184962 → Tunisia , 0.00189877 → Ecuador , 0.00191362 → Malawi ,
 0.00193799 → Bolivia , 0.0020697 → Guinea , 0.00207179 → Czech Republic ,
 0.00214824 → Azerbaijan , 0.00217746 → Turkmenistan , 0.00222082 → Honduras ,
 0.00222545 → Italy , 0.00224767 → Malaysia , 0.00226806 → Dominican Republic ,
 0.00229644 → Hungary , 0.00230383 → Nicaragua , 0.00230628 → El Salvador ,
 0.00234547 → Paraguay , 0.00236042 → Belarus , 0.00236391 → North Korea ,
 0.00240293 → United Arab Emirates , 0.00244024 → Belgium , 0.00246313 → Bulgaria ,
 0.0024838 → Togo , 0.00249742 → Serbia , 0.00252127 → Indonesia ,
 0.00254217 → Lebanon , 0.00255613 → Sweden , 0.00266221 → Mauritania ,
 0.00275697 → Oman , 0.0028488 → Slovakia , 0.00285217 → Finland , 0.00288336 → Liberia ,
 0.00293471 → Papua New Guinea , 0.0029478 → Austria , 0.00294996 → Uruguay ,
 0.00299952 → Central African Republic , 0.00302239 → Singapore , 0.00304246 → Israel ,
 0.00306929 → Ireland , 0.00309858 → Switzerland , 0.00310311 → Portugal ,
 0.00311449 → Puerto Rico , 0.00312515 → Tajikistan , 0.00314484 → United Kingdom ,

0.0031935 → West Bank , 0.00330954 → North Macedonia , 0.00333314 → Cuba ,
 0.00335862 → Georgia , 0.00335997 → Chile , 0.00340993 → Qatar , 0.00343325 → Botswana ,
 0.003475 → Mauritius , 0.00348378 → Kuwait , 0.0035468 → Kyrgyzstan ,
 0.00356462 → Lesotho , 0.00360754 → Mongolia , 0.00370633 → Bosnia and Herzegovina ,
 0.00375135 → Albania , 0.00376152 → Moldova , 0.00376937 → Eswatini ,
 0.00378083 → Costa Rica , 0.00378836 → Haiti , 0.00380591 → Namibia , 0.00387254 → Laos ,
 0.00394666 → Lithuania , 0.00402799 → Guinea-Bissau , 0.00404832 → Gaza Strip ,
 0.00412957 → Republic of the Congo , 0.00420907 → Equatorial Guinea , 0.00422398 → Armenia ,
 0.00427316 → Trinidad and Tobago , 0.00430374 → Japan , 0.00445164 → Gabon ,
 0.00447706 → Bahrain , 0.00493423 → Kosovo , 0.00496321 → Gambia ,
 0.00533784 → Panama , 0.00538622 → Latvia , 0.00551693 → Slovenia ,
 0.00566502 → Jamaica , 0.00597707 → Eritrea , 0.00613143 → Cyprus ,
 0.00632917 → Philippines , 0.00666964 → East Timor , 0.00838681 → Hong Kong ,
 0.0108679 → Canada , 0.0127092 → Greece , 0.0132957 → New Zealand ,
 0.0147756 → Denmark , 0.0162175 → Croatia , 0.0180736 → Estonia ,
 0.0208994 → Norway , Missing[NotAvailable] $\left(3.72356 \times 10^{-7} / \text{km} \right)$ → South Sudan }