The Logic of Metric-Sized Paper

by

Stanley M. Max
Certified Metrication Specialist
U.S. Metric Association
metric.org

The Metric System:
"For All Time, For All People"

With metric-sized paper, the ratio of length to width equals $\sqrt{2}$.

A5 paper length = 210 mm
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$$\frac{\text{Length}}{\text{Width}} = \frac{210\text{ mm}}{148\text{ mm}} = \sqrt{2}$$

A5 paper

A4 paper length = 297 mm
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$$\frac{\text{Length}}{\text{Width}} = \frac{297\text{ mm}}{210\text{ mm}} = \sqrt{2}$$

A4 paper

A3 paper length = 420 mm
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A3 paper length = 420 mm

$$\frac{\text{Length}}{\text{Width}} = \frac{420\text{ mm}}{297\text{ mm}} = \sqrt{2}$$

A3 paper

The entire sheet, when unfolded, is printed on A2 paper. The length of A2 paper is 594 mm, and the width of A2 paper is 420 mm. The ratio of 594 mm to 420 mm equals $\sqrt{2}$.