## Aspect Ratios

A table illustrating the aspect ratios for common image sources, print sizes, paper sizes and monitor resolutions

|  | Name | Ratio | Decimal | Percentage | Key |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Digital | 4:3 | 1:1.33 | 75.00\% |  |
|  | DSLR | 3:2 | 1:1.5 | 66.67\% |  |
|  | 35 mm film | 3:2 | 1:1.5 | 66.67\% |  |
|  | 120 film | 7:6 | 1:1.17 | 85.71\% |  |
|  | APS film | 16:9* | 1:1.81 | 55.30\% |  |
| Standard Photo Sizes | $5 \times 3.5$ | 10:7 | 1:1.43 | 70.00\% |  |
|  | $6 \times 4$ | 3:2 | 1:1.5 | 66.67\% |  |
|  | $7 \times 5$ | 7:5 | 1:1.4 | 71.43\% |  |
|  | $8 \times 6$ | 4:3 | 1:1.33 | 75.00\% |  |
|  | $9 \times 6$ | 3:2 | 1:1.5 | 66.67\% |  |
|  | $10 \times 8$ | 5:4 | 1:1.25 | 80.00\% |  |
|  | $12 \times 8$ | 3:2 | 1:1.5 | 66.67\% |  |
|  | $12 \times 10$ | 6:5 | 1:1.2 | 83.33\% |  |
|  | $14 \times 11$ | 14:11 | 1:1.27 | 78.57\% |  |
|  | $16 \times 12$ | 4:3 | 1:1.33 | 75.00\% |  |
|  | $18 \times 12$ | 3:2 | 1:1.5 | 66.67\% |  |
| $\begin{gathered} \text { Standard Paper } \\ \text { Sizes } \end{gathered}$ | A5 | 7:5* | 1:1.41 | 70.71\% |  |
|  | A4 | 7:5* | 1:1.41 | 70.71\% |  |
|  | A3 | 7:5* | 1:1.41 | 70.71\% |  |
|  | A2 | 7:5* | 1:1.41 | 70.71\% |  |
|  | A1 | 7:5* | 1:1.41 | 70.71\% |  |
| $\begin{aligned} & \text { Standard Monitor } \\ & \text { Resolutions } \end{aligned}$ | SVGA | 4:3 | 1:1.33 | 75.00\% |  |
|  | XGA | 4:3 | 1:1.33 | 75.00\% |  |
|  | SXGA | 5:4 | 1:1.25 | 80.00\% |  |
|  | 1080i | 16:9* | 1:1.78 | 56.22\% |  |
|  | SXGA+ | 4:3 | 1:1.33 | 75.00\% |  |
|  | WSXGA+ | 16:10 | 1:1.6 | 62.50\% |  |
|  | 1080p | 16:9 | 1:1.78 | 56.25\% |  |
|  | WUXGA+ | 16:10 | 1:1.6 | 62.50\% |  |

## What's it for?

This table is intended to help you compare aspect ratios, easily.

For example, using the table you could quickly find out whether or not a 35 mm film print will be cropped if you print it on a $12 \times 8$ (it won't) or whether or not a $5 \times 3.5$ original will be cropped a lot or a little, if you enlarge it to A3 (it would, but only by a smidge).

## Notes

The ratios marked with an asterisk are approximations. Technically, the standard sizes for these items do not result in these exact ratios here, e.g. A4 paper, mathematically, has an aspect ratio of 99:70, which is very nearly, but not quite the same as, 7:5. Accordingly, where the differences are minimal, they have been rounded, so that they can be compared easily.

The key colours indicate items which share an aspect ratio, e.g. all the items with a 3:2 aspect ratio are this colour

Generally, digital cameras, mobile phones and table (other than DSLRs) have image sensors that, natively, produce images with a $4: 3$ aspect ratio. However, there may be some exceptions to this and it is mostly academic, because the image will be processed by the in-camera software and therefore the software settings (rather than the camera's ccd sensor) will determine the aspect ratio of the resulting image file.

