

Figure 1.7
Comparison of 1.33, 1.85, and 2.40 aspect ratios. **A**, 1.33:1. **B**, 1.85:1. **C**, 2.40:1. (Courtesy of Panavision Inc.)

In addition to the aspect ratios previously named, two others that are commonly used are 1.66:1 and 1.78:1. The 1.66:1 aspect ratio is sometimes used when shooting Super 16 mm film format. At one time it was also the aspect ratio for shooting most European motion pictures, but it is not used much anymore. The 1.78:1 aspect ratio may also be referred to as 16 × 9 format and is often referred to as HDTV (high-definition television). The new HDTV televisions have a screen that is almost the same aspect ratio as the standard 1.85:1 movie screen (see Figure 1.8).

See Figures 1.9, 1.10, and 1.11 for illustrations of various aspect ratios.

It is not uncommon when shooting to frame for two different formats at the same time. You may be shooting a feature film, but we all know that most films eventually end up on television or video. By having a combination ground glass, such as a TV/1.85, you can frame the shots accordingly so that they will look correct on a movie screen, as well as when formatted for television.

There are many different formats for shooting, and which one to use is often the decision of the DP, Director, and sometimes even the Producer. This decision determines which ground glass is going to

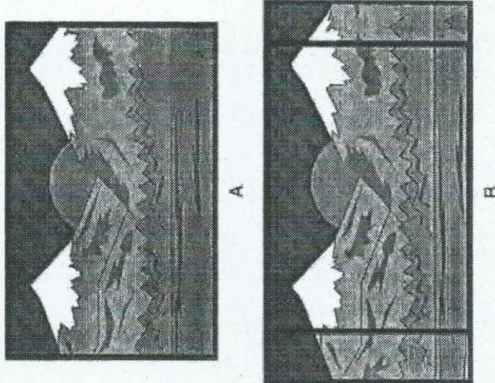


Figure 1.8
A, 1.66:1 aspect ratio. **B**, 1.78:1 aspect ratio (HDTV). (Courtesy of Panavision Inc.)

Format	Aspect Ratio	Dimensions	Description	Scale Drawing	Area
3/4" CCD	1.78:1	.3775 × .2123 in 9.59 × 5.39 mm	3/4" CCD Area		51.7 mm ²
	2.40:1	.3586 × .1500 in 9.11 × 3.81 mm	3/4" CCD Area for 2.40:1 Release		34.7 mm ²
16 mm film	1.37:1	.404 × .295 in 10.26 × 7.49 mm	Regular 16 mm Camera Aperture		76.8 mm ²
	1.66:1	.486 × .295 in 12.35 × 7.49 mm	Super 16 mm Camera Aperture		92.5 mm ²
Genesis	1.78:1	.930 × .523 in 23.62 × 13.28 mm	Genesis CCD Area		313.7 mm ²
	1.85:1	.884 × .478 in 22.45 × 12.14 mm	Genesis CCD Area for 1.85:1 Release		272.6 mm ²
	2.40:1	.884 × .370 in 22.45 × 9.40 mm	Genesis CCD Area for 2.40:1 Release		211.0 mm ²

Figure 1.9 3/4" CCD, 16 mm, and Genesis camera aspect ratios. (Courtesy of Panavision Inc.)