

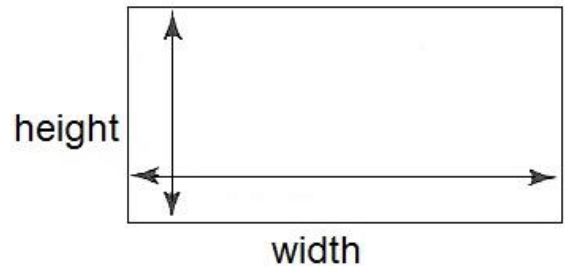
Lesson 11.2

Aspect Ratio

The textbook has some errors in information with respect to movie aspect ratios. Here is the correct information:

An **aspect ratio** of an image is the ratio of its width to its height, written as two numbers separated by a colon (width : height). The most common use is to determine the screen sizes for movies and television.

Older televisions & movies were in aspect ratio 1.33:1, almost square, but not quite. This means that the screen is 1.33 times as wide as it is high.



Over time, as the technology to film in wide screen format developed, various standards of widescreen came about:

- 1.33:1 "Academy Ratio" (sometimes referred to as 4:3)
- 1.66:1 "European Widescreen"
- 1.85:1 "American Widescreen" (often referred to as 16:9)
- 2.2:1 "Super Panavision" and Todd-AO
- 2.35:1 "Panavision" aka "CinemaScope"
- 2.75:1 "Ultra Panavision"

The typical widescreen HD television today is in the aspect ratio 16:9, which is slightly smaller than American Widescreen.

Even though 16:9 is not quite equivalent to 1.85:1, filmmakers often refer to the most common aspect ratio they are using as "16 by 9", because it's quicker to say, it's "close enough", and they all know that they really mean American Widescreen.

These various aspect ratios are the reason for black bars above and below movies when they are shown on tv; this is called “Letterbox” and it is done so that the entire picture fits on the screen of the television.



1.33:1 image on
16:9 screen



16:9 image on
1.33:1 screen

When a film’s ratio doesn’t fit the screen of the tv, and if it is not shown in letterbox to accommodate that, then part of the picture gets cut off. This was frequently accommodated for the older style televisions using what they call “Pan and Scan.” Sometimes the center of the picture is shown, and sometimes more of the left or right gets cut off—either way, part of the movie is missing.



Looking At Movies 4th edition, by Richard Barsam & Dave Monahan