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VIDEO: Aspect Ratio, Resolution & Frame Rate

ASPECT RATIO:

→ The ratio of screen width to screen height
→ Modern standard - 16:9

FUN FACT
86" TV refers to diagonal length

RESOLUTION

→ the size of the image in pixels
→ usually expressed as width in pixels × height in pixels

COMMON VIDEO RESOLUTIONS 1

- Standard definition (SD)
  - → 480p
  - → no longer the "standard"
  - → typically 640 × 480 px, or 720 × 480 px
  - → not a good choice for most modern applications

COMMON VIDEO RESOLUTIONS 2

- High definition (HD)
  - → 720p
  - → 1280 × 720 px
  - → OK for small web content
  - → most screens these days are higher resolution than this, so higher resolution video is ~~better~~ for the web and streaming.

COMMON VIDEO RESOLUTIONS 3

- Full High Definition (Full HD)
  - → 1080p
  - → 1920 × 1080 px
  - → probably the current "standard"
  - → most screens these days have this resolution
  - → a good balance between image detail, and file size / download speed

note: just because higher definition doesn't mean screen has to be bigger → it's about balance the

COMMON VIDEO RESOLUTIONS 4

- Quad High Definition (QHD or 2K)
  - 1440p
  - 2560 × 1440 px
  - high end smartphones and gaming monitors. Design monitors.

COMMON VID RESOLUTIONS 5

- Ultra High Definition (UHD or 4K)
  - 2160p
  - 3840 × 2160 px
  - great image detail for theatrical quality viewing or detailed design.

FRAME RATE — fps = "frames per second"

→ A video is a series of still images (frames) shown in rapid succession

→ 10 fps – the smallest frame rate that is perceived as continuous motion.

→ 24 fps – the standard for movies and TV shows

→ 30 fps – an older common TV standard

→ 60 fps and above – typically for special effects such as slow motion.

↳ if you make it more fps, then slow it down, the fps will be large enough that it still looks like fluid motion

↳ TIME LAPSE IS OPPOSITE → it's less fps.