

IEEE Johnstown – Analog to Digital Television Transition Trivia Challenge

Technical Questions:

1. What two devices were used by the “camera” in mechanical televisions?
A: scanning disk and photosensor/cell/diode
2. How many **visible** scan lines of resolution are defined by the NTSC standard?
A: 486; there are 525 lines in the specification, but 39 are used for synchronization, vertical retrace, closed captioning, etc.
3. How is sound information transmitted in an NTSC standard broadcast?
A: Frequency modulation
4. What television technology offers the darkest “black” value, CRT, LCD, rear projection, or plasma?
A: CRT; a plasma display that is turned on actually requires minimal pre-charging, which illuminates the display slightly more than a CRT pixel which does not receive a signal
5. What is the full (maximum) resolution specified by the ATSC standard?
A: 1920 by 1080 pixels

General Questions:

1. What was the first mechanical television?
A: Radiovision
2. Where was the first demonstration of an all-electronic television system given?
A: Philadelphia; On August 25, 1934 at the Franklin Institute
3. What was the primary technology used in television camera tubes from 1931 through 1946?
A: Iconoscope; the Iconoscope stored charges on the receiving plate rather than providing an instantaneous value as the scanning beam moved, thus increasing the overall level per pixel that was transmitted and making a clearer image
4. In what year did Pennsylvania get its first commercially licensed television station?
A: 1941
5. When was the first live, national broadcast in the United States?
A: 1951; September 4, 1951, for President Harry Truman’s speech at the Japanese Peace Treaty Conference

6. When was the first plasma television display described?
A: 1936; Designed by Kálmán Tihanyi, it involved a single “transmission point” being moved at great speed behind a grid of cells arranged in a thin panel display, which would be excited to different levels by varying the voltages to the point

1935 – 1950:

1. What was the first television station in the United States?
A: W3XK in Wheaton, MD, which started broadcasting on July 2, 1928, was the first, although it only transmitted silhouette images
2. In what year were the first commercial licenses for television granted by the FCC?
A: 1941
3. What was NBC’s first regularly scheduled broadcast?
A: 1939 World’s Fair
4. In what year did the FCC adopt the NTSC standard?
A: 1941; the standard was adopted on May 2, 1941
5. What was the first magazine dedicated to the medium of television?
A: Television, published in 1928

1951 – 1965:

1. How many television sets were there in the US by June of 1951?
A: 13 million
2. What television show premiered on October 15, 1951?
A: I Love Lucy
3. What television show premiered on October 4, 1957?
A: Leave it to Beaver
4. In what year did RCA finally make a profit (relative to research and development costs) on its color television sets?
A: 1959
5. In what year did RCA sell its 20 millionth color television set?
A: 1955

6. What year was the first time that greater 90% or greater of US households owned at least one television set?

A: 1962

7. In what year was the first coast-to-coast broadcast in color?

A: 1954, the Tournament of Roses parade by NBC

8. Which manufacturer was the first to create an NTSC-color compatible television?

A: Westinghouse

9. Which television show began its 20 year run in 1955?

A: Gunsmoke, which was just recently surpassed in the record for shows which are not produced multiple times per week; the Simpsons now has 430, while Gunsmoke had 402

1966 – 1980:

1. In what year did all three networks first broadcast full color prime-time lineups?

A: 1966 – 1967 season

2. When was the first year in which sales of color television sets exceeded sales of black and white television sets in the United States?

A: 1972

3. Which popular television show had the lyrics removed from its title song due to concerns over its name of “Suicide is Painless”?

A: M.A.S.H.

4. What television show ran for 8 years before being renamed “Archie Bunker’s Place” in 1979?

A: All in the Family

5. Which animation studio became synonymous with Saturday morning cartoons in the early 1960s before introducing their most popular and enduring show in 1969, about a group of teenagers and a talking dog who solved crimes together?

A: Hanna-Barbera

1980 – 1995:

1. Which television show premiered in 1984 and holds the record for the longest run at number one in the Nielsen ratings, holding the top spot for five consecutive years?

A: The Cosby Show

2. Which long-running television show made the leap from the Tracy Ullman Show to prime time in 1989?

A: The Simpsons

3. What fan-favorite show was originally titled “Insomnia Café” and first aired on September 22, 1994?

A: Friends

4. What television show gained fame for, amongst other things, always having the Superman logo on the show at least once per episode?

A: Seinfeld

5. Which television show spin-off of “Perfect Strangers” became most popular for a character originally intended to be a guest star, and was aired for nine seasons?

A: Family Matters

1995 – Present:

1. When is the deadline for the ATSC standard to replace the NTSC standard for US broadcasts?

A: June 12, 2009

2. What event dominated the US airwaves and news reporting for 1995?

A: The OJ Simpson Trial

3. What is the most-watched show on television?

A: American Idol

4. What is the most-watched scripted show on television?

A: House

5. How many national broadcast networks are there in the United States?

A: 7 (PBS, NBC, CBS, ABC, Fox, CW, and My Network TV)