

= Pilot (Numbers) =

" Pilot " is the first episode of the American television show Numb3rs . Based on a real @-@ life serial rape case , " Pilot " features two brothers , an agent with the Federal Bureau of Investigation (FBI) and a mathematics professor at a Southern California university , using their individual skills to capture a serial rapist who has begun to kill his victims . " Pilot " also introduces the theme of mathematics being used to solve crimes .

Written by series creators Cheryl Heuton and Nicolas Falacci , the episode was filmed twice , once in Boston , Massachusetts and once in Los Angeles , California , with two different casts using two somewhat different scripts . The test audience could not believe that the three men who portrayed the family could be related to each other , so the producers made cast changes to the family . They also made several changes to the rest of the cast to accommodate the changes in the script . Heuton and Falacci changed the script to focus on the brothers ' relationship with each other . When filming finished , CBS picked up the episode and the series three weeks later .

" Pilot " first aired in the United States on January 23 , 2005 . The episode received mixed reviews . Mathematicians and students at California Institute of Technology enjoyed the episode and were impressed with the mathematics in it . In contrast , television critics felt as though the episode 's plot about a serial rapist was unoriginal , although one critic called the math boring .

= = Plot summary = =

FBI Special Agents Don Eppes (Rob Morrow) , Terry Lake (Sabrina Lloyd) and David Sinclair (Alimi Ballard) investigate a serial rapist who has begun killing his victims . With the twelfth victim , Karen Silber (Kate Norby) , changing her story again and the thirteenth victim 's car missing , Don runs out of viable leads . Taking a map and a case file with him , Don goes to his childhood home , owned by his father Alan Eppes (Judd Hirsch) , to take a shower . Don 's younger brother , Dr. Charlie Eppes (David Krumholtz) of CalSci 's mathematics department , finds and studies the map which Don lays on the dining room table . As Don prepares to return to the office , Charlie tries to talk Don into letting him help with the investigation and is inspired by the pattern of drops emanating from the family 's sprinkler . He tells Don that he can use a mathematical model to find the neighborhood where the rapist resides . Skeptical , Don agrees to let Charlie assist him in the investigation .

Charlie develops the model needed to find the rapist and refines it with graduate student Amita Ramanujan 's (Navi Rawat) assistance . Charlie 's model yields what he calls a " hot zone " , an area in which the suspect probably lives . As the case progresses , Silber is found dead in her house . Don and his team resort to comparing DNA samples of men who live in the hot zone to samples of the rapist / killer . Using statistical analysis , Charlie deduces that Silber lied about where her rape took place . After Don learns from Silber 's colleagues where Silber was raped , Charlie refines his equation , which yields a smaller area within the original hot zone . DNA , however , clears everyone in the original hot zone . As a result , Assistant Director in Charge (ADIC) Walter Merrick (Anthony Heald) pulls Don and his team from the investigation . At the same time , Dr. Larry Fleinhardt (Peter MacNicol) , Charlie 's colleague and friend , encourages Charlie to make his equation " less elegant " and to evaluate the worth of his consultation work .

Back at the Eppes house , Charlie and Don discuss what went wrong . Alan is confident that the math is correct . Don tells Charlie that if Charlie ran his model on Don , the model will not show Don at his apartment . Instead , it would zone in on his office , where he spends most of his time . Charlie then realizes that he needs to modify his model to identify two hot zones , one where the suspect possibly resides and one where he possibly works . Using the new equation and a list of potential suspects who work in the new hot zone , Don , Terry , and David confront the suspect and find his latest victim . After Don kills the suspect in a hostage situation , he calls Charlie down to the crime scene to tell Charlie that the suspect lived in the original hot zone but moved three weeks earlier . This revelation proves that Charlie 's models are correct .

= = Production = =

= = = Original pilot = = =

Two pilots were filmed . Fascinated by mathematicians , creators Cheryl Heuton and Nicolas Falacci decided to create a show about one . With the encouragement of CBS development executives , they wrote several pilots revolving around mathematicians and scientists , including the pilot for Numb3rs , over the course of 14 years . Knowing that mathematics would not be readily accepted by the general public on its own , Heuton and Falacci in 2003 decided to use the police procedural format to facilitate the acceptance . When Falacci and Heuton pitched the pilot , CBS agreed to produce it about halfway through their presentation .

Although they had considered several story ideas , Heuton and Falacci wanted to feature a case in which math was used to solve a traditional type of crime . They decided to base the episode on a real @-@ life serial rapist case in which police asked Dr. Kim Rossmo to assist them in the investigation . In 1998 , Rossmo , then with the Vancouver Police Department , was called in to help Lafayette , Louisiana , police investigator McCullan Gallien find the South Side Rapist . Rossmo and Gallien visited the crime scenes , and Rossmo used criminal geographic targeting , a mathematical model used to find the area in which the suspect would most likely reside . Together , Rossmo and Gallien developed a map indicating the most likely location of the rapist 's residence . After DNA cleared everyone living in the area , Gallien learned that a sheriff 's deputy in a neighboring department , Randy Comeaux , was a potential suspect . He had lived in the area during the time frame of the rapes but moved to a residence in the neighboring jurisdiction some time later . DNA on a cigarette butt left by Comeaux confirmed that he was the rapist , and Comeaux was arrested .

The pilot was originally filmed in Boston , which was selected because of Falacci 's familiarity with the area and because of the contrast between academia and the working class . Filming began in the spring of 2004 . Although the Massachusetts Institute of Technology (MIT) refused to allow filming on campus , the cast and crew spent two days filming in the city . Dr. Tony Chan of UCLA 's physical science department consulted on the original pilot episode . Although initially hesitant about auditioning , David Krumholtz was the first person cast and won the role of Charlie Eppes . Other original cast members were Len Cariou as Alan ; Gabriel Macht as Don ; Peter MacNicol as Charlie 's mentor ; Anna Deavere Smith as Don 's boss ; Jennifer Bransford , Michael Rooker , and Alimi Ballard as FBI agents ; and Navi Rawat as a MIT graduate student . When filming was completed , executive producers Ridley Scott and Tony Scott and producer Skip Chaisson added graphics and music to the footage . They also added transitions to assist the storytelling . To accommodate these changes , CBS allowed the producers to delay the delivery of the pilot to the studio by two weeks .

= = = Second pilot = = =

When previewed , the focus group liked the concept but hated the way the pilot was produced . Among the problems with the original pilot was the believability of the Eppes family in terms of both physical appearance and chemistry , with the chemistry of the actors being the larger issue . Although Heuton and Falacci liked Cariou , Macht , and Krumholtz , Heuton and Falacci did not know how the three actors playing the Eppes family would interact with each other until filming began .

Since both the focus group and network executives liked the concept of the pilot , CBS decided to recast and reshoot it . Filming began again in September 2004 . To accommodate the budget for the new pilot , the second pilot was set and filmed in Los Angeles . Administrators at the California Institute of Technology (Caltech) agreed to allow producers to film the academic scenes at Caltech . Dr. Gary Lorden , one of Caltech 's math professors , served as math consultant of the second pilot . The producers kept Krumholtz , MacNicol , Rawat , and Ballard . Rooker and Macht left the cast , and Rob Morrow replaced Macht as Don . Other casting changes included the addition of Sabrina Lloyd as a FBI agent , Judd Hirsch as Alan , and Anthony Heald as Don 's boss .

The producers rewrote the script to accommodate changes in story , characters , and basic idea of the series . They decreased the role of Don 's boss to focus the main conflict on the brothers ' worldviews . They rewrote the structure and composition of Don 's team . They also revised the start of Charlie 's involvement with the investigation to incorporate Heuton and Falacci 's original idea of Don taking the work home with him . When the second pilot was presented to the focus group , the group liked it . CBS picked up the pilot three weeks after filming ended .

= = Previews = =

The second pilot was screened at Caltech on January 10 , 2005 , and Heuton , Falacci , Hirsch , Morrow , Krumholtz , and Lorden participated in a panel discussion after the preview . The students who saw the screening at Caltech enjoyed the episode . The pilot was then previewed during the Joint Mathematics Meeting in Atlanta , Georgia from January 12 through January 14 , 2005 . Ed Pegg , Jr . , a member of the Mathematical Association of America (MAA) who watched the episode at the conference , stated that he liked it and that he was impressed with the decision to depict the mathematics accurately . As for premiering on network television , the pilot initially was to air on January 21 , 2005 , but it was moved to January 23 , 2005 , after the AFC Championship game in order to be seen by a larger audience . When it premiered on TV on January 23 , 2005 , 25 million people watched the pilot episode of Numb3rs , beating the audience for the pilot episode of Desperate Housewives by about 4 million viewers .

= = Reception = =

Reception of the pilot varied according to the audience in question . The pilot was very well received by the mathematics community . Within a couple of weeks of Pegg 's article for the MAA , Keith Devlin , another member of the association , gave the pilot a very favorable review .

As for the mainstream media , the reviews for the pilot were mixed . Gillian Flynn of Entertainment Weekly commented that , given that the case was about a serial killer , the pilot did not show the math in an original way . John Leonard of the New York Magazine called the cast " superb " but criticized the pilot for being too busy . Melanie McFarland , the Seattle Post @-@ Intelligencer 's TV critic , asserts that the pilot 's storyline was an " unfortunate choice " for the pilot episode . Robert Bianco of USA Today stated that the pilot 's storyline was unoriginal . Tim Goodman of the San Francisco Chronicle , however , stated that the pilot and the cast were excellent but that the math was uninteresting .

= = DVD notes = =

On the Numb3rs season one DVDs , three features address both pilots . The bonus feature " Point of Origin : Inside the Unaired Pilot " on the Numb3rs : The Complete First Season DVDs highlights the differences between both pilots and features clips from the original pilot . In the feature , creators Heuton and Falacci , executive producers Ridley Scott and Tony Scott , co @-@ executive producer David W. Zucker , casting director Mark Saks , and producer Skip Chaisson detail the changes in cast , filming , wardrobe , and makeup . On the audio commentary for the " Pilot " , Heuton , Falacci , Morrow and Krumholtz discuss not only additional changes in the pilot but also additional production trivia from the second pilot . Although the bonus feature " Crunching Numb3rs : Season One " features clips and discussions for other episodes throughout the season , it also addresses the production of the second pilot .