**Prompt for interface A (video)**

The following questions ask you to find a location of specific information in the lecture. Please indicate your answer by indicating the time in the video (e.g. 3:08). Please indicate the start time of where the specific information is mentioned. Or, write down several words from the phrase where the information is located.

**Proving Trigonometry Formulas from Euler’s Formula (Lee Stemkoski)**

**1. Find the point in the lecture where it introduces the property that ‘if , then , and ’ is introduced. (Text + indirect search)**

Answer: 5:01, “Now, interesting thing, when two complex numbers are equal, their real in their imaginary parts must also be equal.”

**2. Find the point in the lecture where the property that is an even function is used. (Text, direct search)**

Answer: 1:00, “Furthermore, since is an even function…”

**3. Find the point in the lecture where instructor underlines . (Visual)**

Answer: 5:26, “which must therefore be equal to this part.”

**4. Find the point in the lecture where the instructor strikes out part of an equation, where terms add up to eliminate each other. (visual)**

Answer: 2:23, “Now, there is some great cancellation which happens,”

**5. Find the point in the lecture where the instructor writes the equation for straight from Euler’s formula. (visual + text)**

Answer: 4:50, “Next, I am going to take Euler’s formula and apply it directly…”

**6. Find the point in the lecture where the instructor finishes proving the first trigonometric formula. (visual + audio/text)**

Answer: 2:53, “That’s just the first way you can use…”

**Fundamental Theorem of Calculus (Khan Academy)**

**1. Find the point in the lecture where the instructor introduces an application problem to use the fundamental theorem of calculus. (text, indirect)**

Answer: 5:38, “Well, let’s say someone told you that they want to find the derivative…”

**2. Find the point in the lecture where the property that every continuous function has an antiderivative is stated. (text, direct)**

Answer: 4:09, “Every continuous function, every continuous f …”

**3. Find the point in the lecture where the instructor introduces a point *x* on the graph, in the domain [*a*,*b*] of function *f*. (visual)**

Answer: 1:10, “Let me pick this right over here, x.”

**4. Find the point in the lecture where the instructor fills in (colors) a region under the curve of graph . (visual)**

Answer: 1:13, “So let’s define some new function to capture…”

**5. Find the point in the lecture where the instructor substitutes ‘x’ instead of ‘t’ in an expression. (visual + text)**

Answer: 6:42, “Everywhere you see a t, replace it with an x…”

**6. Find the point in the lecture where the instructor writes an integral expression for a bounded area under some curve. (visual + text)**

Answer: 1:44, “is the definite integral from a to x of f(t)dt…”

**Uniform Distribution (Actuarial Path)**

**1. Find the point in the lecture where the equation for the Moment Generating Function of X, is introduced. (text, direct)**

Answer: 3:39, “Finally, the MGF, the moment”

**2. Find the point in the lecture where for a<x<b is expressed as an integration. (text, indirect)**

Answer: 5:17, “When x is between a and b, then the CDF”

**3. Find the point in the lecture where the height of the graph of f(x) is denoted with a variable on the graph for the first time. (visual)**

Answer: 1:34, “We can calculate the length of that height that we need …”

**4. Find the point in the lecture where the instructor colors an area under the graph of a function. (visual)**

Answer: 7:38, “is equal to the area of that…”

**5. Find the point in the lecture where the instructor starts deriving how to get the values for. (visual + text)**

Answer: 4:06, Let’s find the CDF.

**6. Find the point in the lecture where the instructor equates an expression inside an integral with the equation . (visual + text)**

**Answer: 5:58, But, f(x) is 1/b-a.**

**Moment Method Estimation (Machine Intelligence Wiki)**

**1. Find the point in the lecture where the equation for the sample mean () is introduced.**

Answer: 2:52, “The sample mean is equal to the 1/n …”

**2. Find the point in the lecture where the quadratic formula is used to derive an expression for *b*.**

Answer: 5:45, “Therefore the value of b is given by…”

**3. Find the point in the lecture where an expression is identified as the variance of the sample.**

Answer: 7:51, “You can note that the value within the parenthesis is clearly the variance of the sample.”

**4. Find the point in the lecture where ‘*a’* is substituted by a different expression in another equation to get an equation in terms of ‘*b*.’**

Answer: 4:30, “By plugging-in this value in the equation six…”