**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.

**Prompt for interface B (ours)**

The following questions ask you to find a location of specific information in the lecture. Please indicate your answer by indicating the beginning of the sentence or phrase in the transcript, where the specific information is mentioned.

Search Task Questions (Answer Key)

**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.**

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 double angle formula for is introduced.**

Answer: 6:12, “If you let a=x and b=x, then you’ll get cos(2x) …”

**3. Find the point in the lecture where the property that ‘ is an even function’ is used.**

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

**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,”

Search Task Questions (Answer Key)

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

**1. Find the point in the lecture where it introduces an application problem to use the fundamental theorem of calculus.**

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 it introduces a point *x* inside the domain [*a*,*b*] of function *f*.**

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

**3. Find the point in the lecture where the condition for a function to have an antiderivative is stated.**

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

**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…”

Search Task Questions (Answer Key)

**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…”

Search Task Questions (Answer Key)

**Uniform Distribution (Actuarial Path)**

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

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

**2. Find the point in the lecture where the for x > b is stated for the first time without derivation.**

Answer: 2:55, “It’s 1 if x>b.”

**3. Find the point in the lecture where for a<x<b is expressed as an integral.**

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

**4. 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 …”