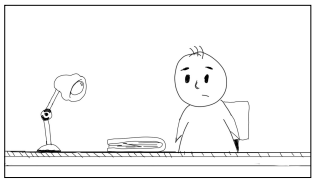
AR_LEARNING_APP

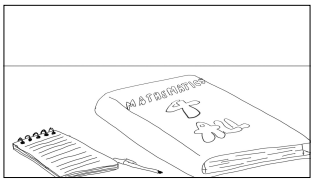
Boards: 31 | Shots: 31 | Duration: 1:17 | Aspect Ratio: 16 : 9
DRAFT: DECEMBER 20, 2023

1A 0:00



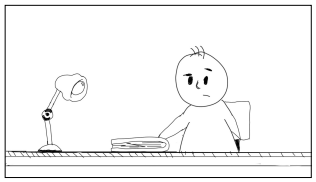
Student about to study and do his math home work

2A 0:02



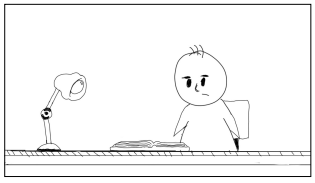
This is a mathematical home work. For all. Trigonometry

3A 0:04



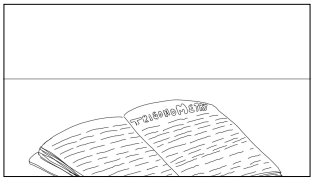
Student is about to work on his problem on his own without much understanding of the subject.

4A 0:06



He opens the textbook to the page of the assignment.

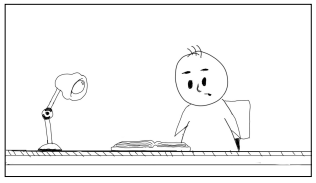
5A 0:11



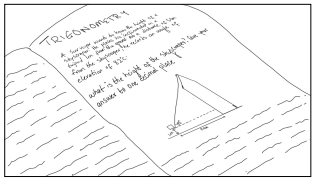
The problem is a trigonometry problem.

Starting with the introduction to the subject and key principles.

6A 0:13

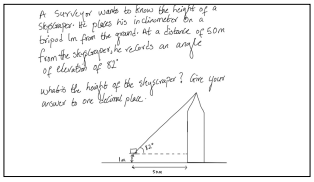


7A 0:15



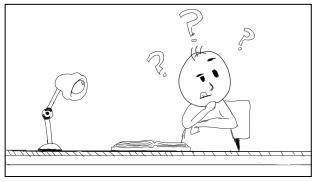
This is a normal trigonometry problem, stating and using real world scenarios and objects.

8A 0:20



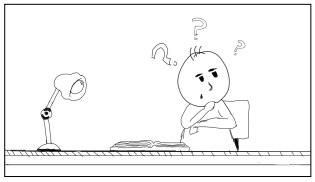
A clearer view of the trig. problem. Image below is a 2D representation of the problem. Using shapes and lines

9A 0:30



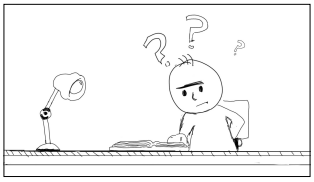
Student is trying to understand the problem.

10A 0:32



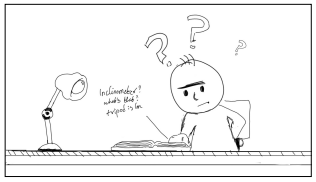
He doesn't quite understand the question and the image that is used to illustrate the problem.

11A 0:34



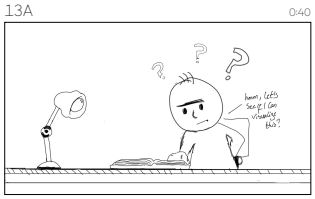
Hmm, he looks back at the question again.

12A 0:36



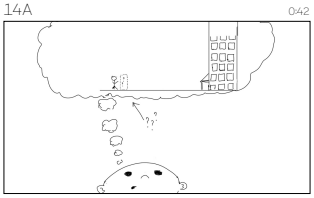
Like most student, he doesn't know what these things are or how they look.

13A 0:40



He tries to visualize the concept to see if he can better grasp.

14A 0:42



He can imagine a building, but he doesn't know what a tripod is or what a inclinometer is or looks like. Also, what sort of building would it be anyway?

15A 0:46

The student is missing some important aspect of his trig. problem because he can't visualize most of it.

How can he solve this problem.

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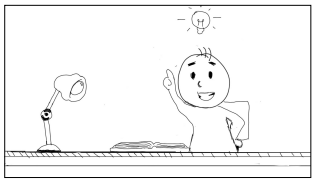
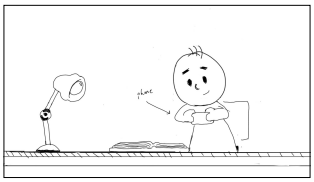
16A 0:48



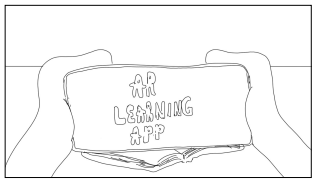
Student has an idea of how he can solve this problem using AR.

17A 0:49



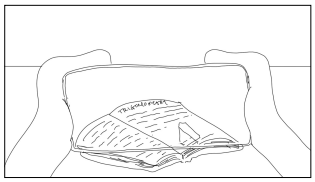
He pulls on his mobile device (phone, or tablet).

18A 0:51



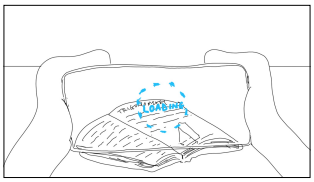
The AR app is the starting up.

19A 0:53



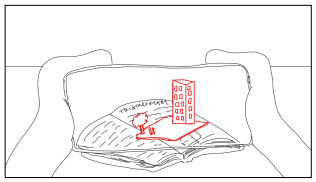
Using the mobile device camera to view the math problem.

20A 0:55



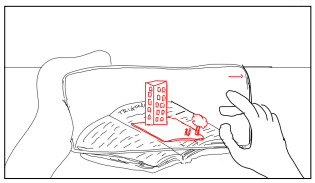
Using the image or a feature as a trigger the AR app begins to load the virtual content.

21A 0:57



A virtual representation of the math problem is placed on the pages of the textbook. Superimposed on the image on the pages.

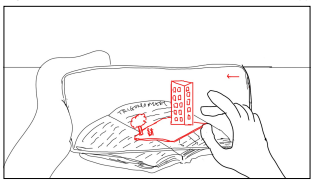
22A 0:59



The system can be interacted with using hand gestures on the screen on the mobile.

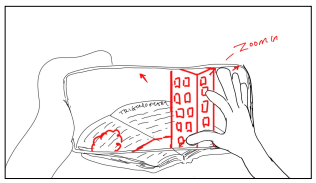
Function #1: Sliding their hand on the screen, the virtual content rotates to reveal the other side or perspective of the model.

23A 1:00



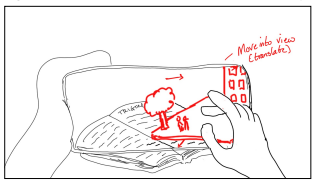
sliding the hand on the screen to take object back to it's default state or show another part of the models from the right.

24A 1:02



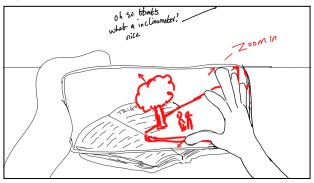
Function #2: Expanding the thumb and middle finger to zoom in on the model. having a much clearer view of the model.

25A 1:04



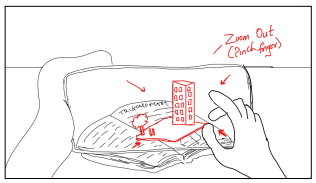
in the zoomed in state the student can slide hidden aspect of the content into view.

26A 1:06



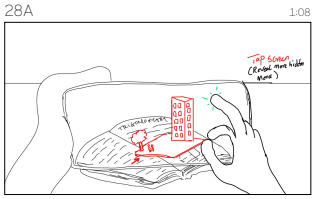
extended the fingers again allows the student to zoom in further on content. Now, he can see what most of the things he didn't know look like.

27A 1:08



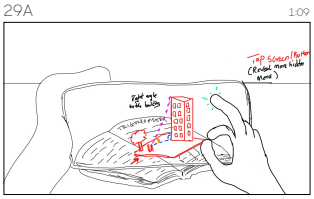
Function #3: pinching the fingers together zooms out of the content and brings it to normal view.

28A 1:08



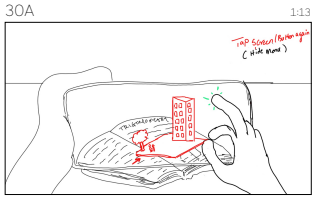
Tapping the screen (still under review), or on a button reveals more hidden features or information for further understanding.

29A 1:09



By tapping on the screen, lines and mathematical information is overlaid on the existing content. Now student can see the right angle triangle and the labels on them.

30A 1:13



Tapping on screen or using the button hides the content on the screen.

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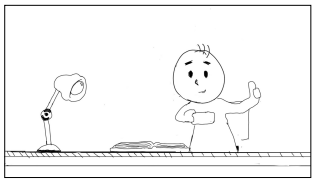
31A 1:15



End off the AR app demonstration.