

ESCAPE ROOM (TEACHER GUIDE)

Below are the “keys” to unlock each screen for this Desmos Classroom activity.

Screens 1-2

These contain the lesson’s essential question and lesson objectives. Students are expected to read these screens.

Screen 3: A Graphical Look at Identities

Students should still be progressing together as a class. Students enter a text response on this screen.

Screen 4: A Graphical Look at Identities

Entering the following answers unlocks screen 5:

- (1) Yes
- (2) No
- (3) Yes

Students receive feedback at the bottom of screen 4. They should not proceed to screen 5 until they get the correct answers on screen 4.

Screen 5

Students are expected to read the story, then proceed to the next screen.

Screen 6

Students are expected to read the story, then proceed to the next screen.

Screen 7: Using Trig Identities

Students are to select “Arrrgh...I’m ready.” Entering the following answers unlocks screen 8:

(4) $\frac{\sqrt{6} + \sqrt{2}}{4}$

$$(5) -2 - \sqrt{3}$$

$$(6) \frac{\sqrt{2} + \sqrt{6}}{4}$$

Students receive feedback at the bottom of screen 7. They should not proceed to screen 8 until they get the correct answers on screen 7.

Screen 8

Students are expected to enter a whole number greater than 3.

Students receive feedback at the bottom of screen 8. They should not proceed to screen 9 until they get the correct answers on screen 8.

Screen 9

Students are expected to pause the Desmos activity and use their resources from previous lessons to complete their **Treasure Map** handout. Students are then expected to click “I have completed my treasure map.” to unlock screen 10.

Screen 10

Students are to click “Read the Clues.” Entering the following answers unlocks screen 11:

(8) G

(9) D

(10) H

Students receive feedback at the bottom of screen 10. They should not proceed to screen 11 until they get the correct answers on screen 10.

Screen 11

Students are to select the third option: “For $0 \leq \theta < 360^\circ$, there are only 3 solutions to $\sin(2\theta) = \cos(\theta)$.” to unlock screen 12.

Screen 12

Students are expected to read this screen then proceed to screen 13.

Screen 13

Students are expected to read this screen, answer the question, click the submit button, and then turn in their scratch work.