Geometry

Emergency Lessons - School Closure

One set of lessons for learning support, Geometry, College Prep Geometry, and Gifted Enrichment as lessons have some tiered assignments with accommodations.

Outline of Days

Day 1: Section 9.1 textbook

Review Pythagorean Theorem

Day 2: Apply Pythagorean Theorem

w/area of triangle and trapezoid

Day 3: Section 12.1 Textbook

Three-Dimensional Figures

Day 4:

Using Space Efficiently Activity Part 1

Day 5:

Using Space Efficiently Activity Part 2

Assessments

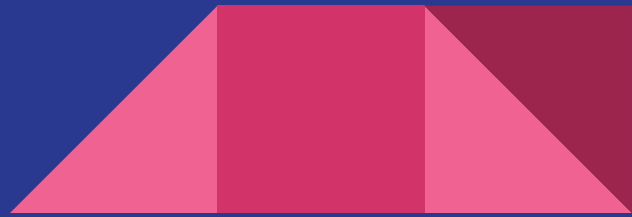
Student MAKES contact with Teacher: Via Google Meet, Email, or Call

Student textbook or online bigideasmath.com problems completed.

Online Students can submit items in google classroom through document turn in area or by teacher made google forms. The textbook online website will record automatically.

PRACTICE DAY

- Google classroom question on HOME Internet connection to check each students comfort level on assignments.
- In school, we will have a google meeting on a day (most likely Mon. Jan 27).
- Show link for google MEET, bigideasmath.com assignment and videos.
- Take a picture of your work for an assignment and load into a file.
- Discuss contingency plan such as phone call into school with voicemail left on issue so Mrs. Pletcher can respond back asap.
- All students should have a HARD COPY of their textbook at home to complete an assignment on paper.
- Download this file which is also pdf posted off Teacher Class Page



Day 1: Review of Pythagorean Theorem

Objective: Use the Pythagorean Theorem to find a missing side of right triangle.

Use the Student Journal pdf for notes and examples - complete the 2 pages

- Section 9.1 Review Pythagorean Theorem -both cases Youtube video. This is an old video from 2021 by Mrs. Pletcher. In 2024 you can still view it but also view bigideasmath.com examples in 9.1 section also.

https://youtu.be/4TjuABuwmbs

If offline, read through textbook pgs. 448-454

Day 1: Continued Work

Online to complete - site records

Bigideasmath.com Accounts

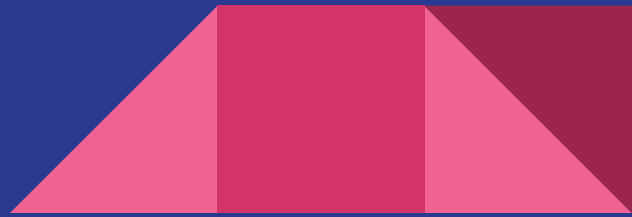
Use Dynamic Classroom for check option and record in real time.

Offline to complete - turn in paper copy later in portfolio or picture turn in through classroom when able

Textbook Pages 452
Period 1, 4 Do all #1-20
Period 2: CP students complete the #1-8, 12-20, 25,26, 29 (also in place of #9-11)

Note an accommodation for learning support : Reduced number of problem to odds only

Note an accommodation for accelerated learners : keep radical form than decimals



Day 2: Use of Pythagorean Theorem w/ AREA

Objective: Use the Pythagorean Theorem to find area of a triangle or trapezoid

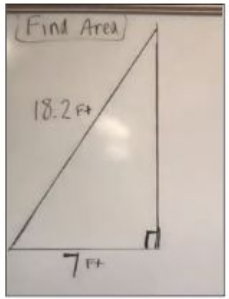
9 minute Edpuzzle for these examples

To be copied in order to use

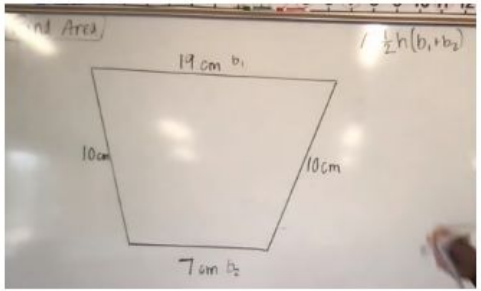
As a guide on practice problems

The Edpuzzle link is off the Question of the Day

Example:

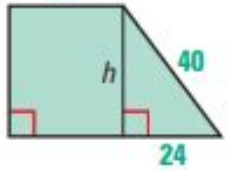


Example:

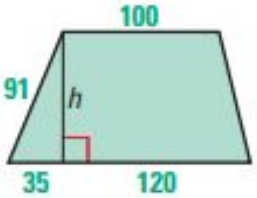


Using the Pythagorean Theorem Find the height using the Pythagorean Theorem and a calculator. Then find the area of the trapezoid.

29.



30.

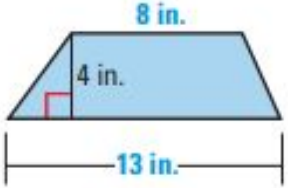


31.

32. Multiple Choice What is the area of the trapezoid?

Ⓐ 25 in.^{2} Ⓑ 42 in.^{2}

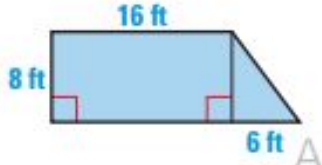
Ⓒ 68 in.^{2} Ⓓ 84 in.^{2}



33. Multiple Choice What is the area of the trapezoid?

Ⓕ 88 ft^2 Ⓖ 128 ft^2

Ⓗ 152 ft^2 Ⓙ 176 ft^2



Day 2 - FID Practice Problems

Do these on paper after watching and copying down Edpuzzle to practice.

Day 3: Three Dimensional Figures

Objective: Identify parts, names, and cross sections of solids

Use the Chapter 12 Section 1 ---

Dynamic Classroom in bigideasmath.com has an EXPLORE IT demonstration where the slice can be changed so you can see the cut cross-section. See the next slide for a view.

Next use the video examples to take some notes on terms, etc.

Watch Examples 1,2,3 and Complete the Self Assessments # 1-9

If offline, read through textbook pgs. 620-622 has still examples and practice problems.

You can play with the online EXPLORE IT c. demo

12.1 Cross Sections of Solids

Self-Assessment Learning

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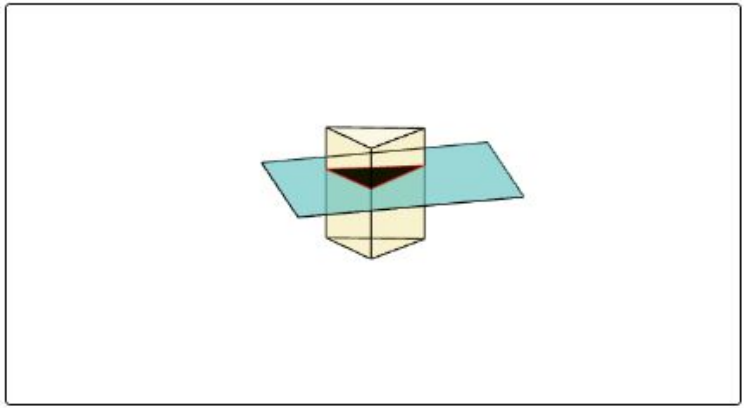
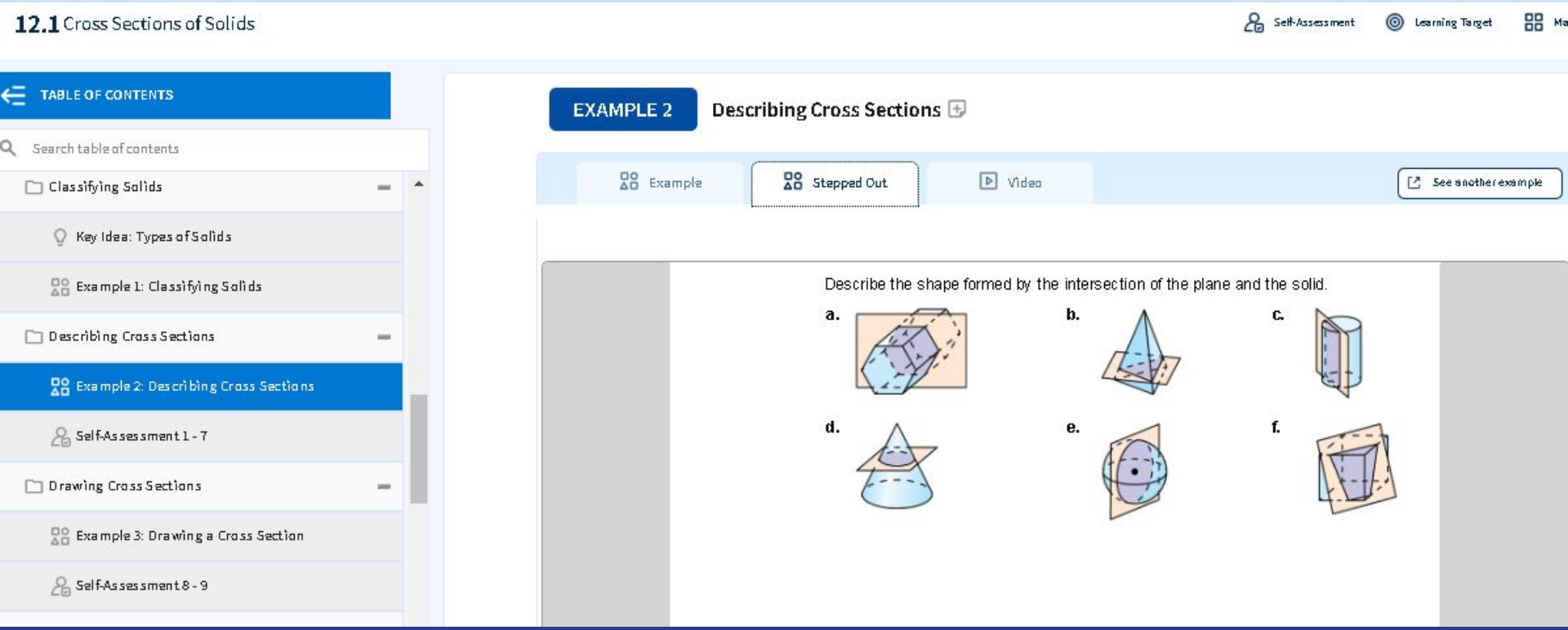
- Preparing for Chapter 12
- 12.1 Cross Sections of Solids
  - Laurie's Notes
  - Explore it!
  - Warm-Up
  - Classifying Solids
  - Describing Cross Sections
  - Drawing Cross Sections
  - Solving Real-Life Problems
  - Practice

b. Describe how you can slice the wedge of cheese so that the cross section formed is the given shape.
   i. triangle
   ii. rectangle
   iii. trapezoid

c. Is there more than one way to slice the wedge of cheese in part (b) to form a triangular cross section? Explain. Use drawings to support your answer.



Online - watch ----------Offline read pg 620-622



Day 4: Packing a Truck Activity

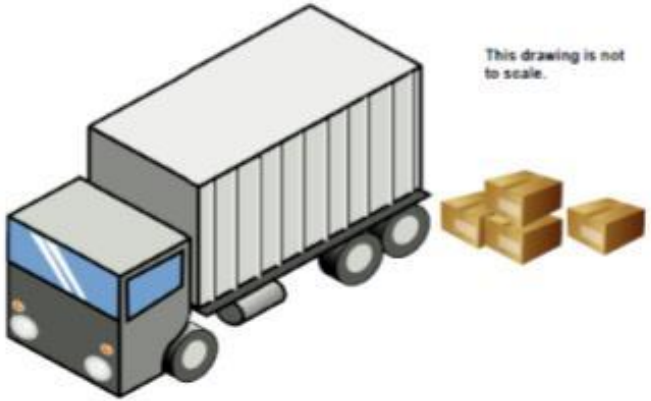
1) Watch this video from Home Depot on packing a moving truck. Then answer the question of the day by commenting on something you saw in this video related to proper packing.

   https://www.youtube.com/watch?v=_uPh-Go75OM

2) Open the pdf to see the truck image and instructions for this packing problem.
3) Draw and write a report on your answer to the maximum number and how the boxes can be packed to use the full back of the truck.

Packing It In

Stefan is packing boxes into the back of a truck.



The empty space in the back of the truck is 245 cm (W) by 250 cm (H) by 890 cm (L).
The boxes are all identical and measure 50 cm by 60 cm by 80 cm.
They can be arranged in any way in the back of the truck.

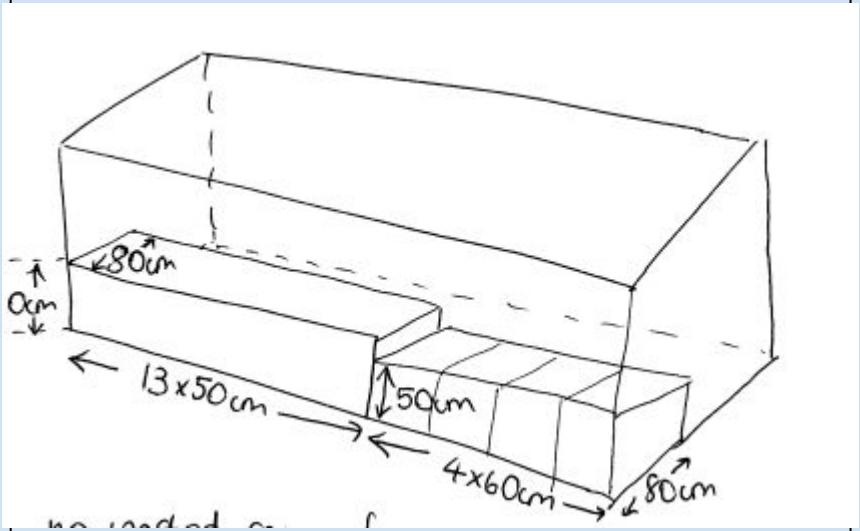
Give instructions to Stefan on how to pack the truck so that the **maximum** number of boxes will fit in. State how many boxes will fit, if he packs the truck according to your instructions.

You may use Google Docs or another online to draw and write detailed instructions.

Or you can draw a picture on paper and take a snapshot to upload into the assignment post.

Make sure you say the MAXIMUM number of boxes to realistically fit in this truck. The boxes can not be modified such as smashing them or cutting them into smaller pieces.

For example:



Day 5: Analyze Other Sample Work on Packing Truck

Evaluating Sample Student Responses

1. Look carefully through each student's solution.
2. Talk about the methods they have used.
3. Answer the questions on the sheet. Use blank paper if you need more space.
4. Discuss what is good and bad about each solution and whether there are any ideas that you can use.

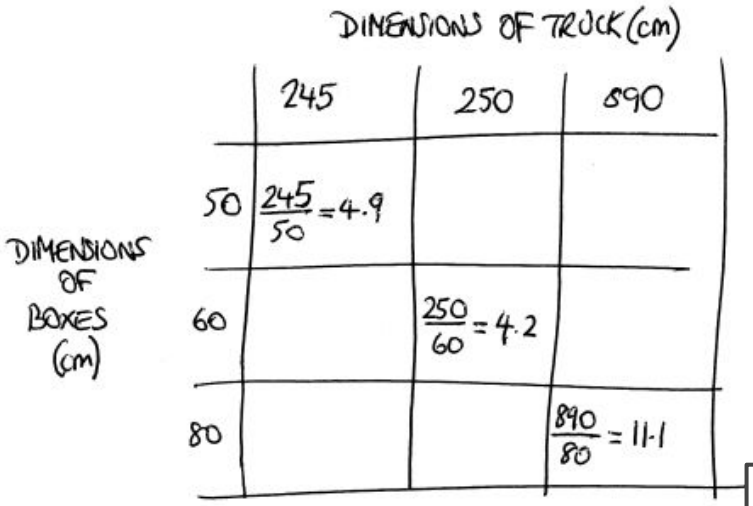
1) Packing the Truck Activity Part 2 pdf needed. It will have 3 different student responses for you to analyze and give feedback on.

2) Use this Google Form Link to record your review.

https://forms.gle/UuUyy2czzThxeUai6

Sample Responses to Discuss: Leillah

NUMBER OF BOXES OF EACH SIZE THAT WILL FIT EACH WAY



NUMBER OF BOXES = 5 x 4 x 11 = 220

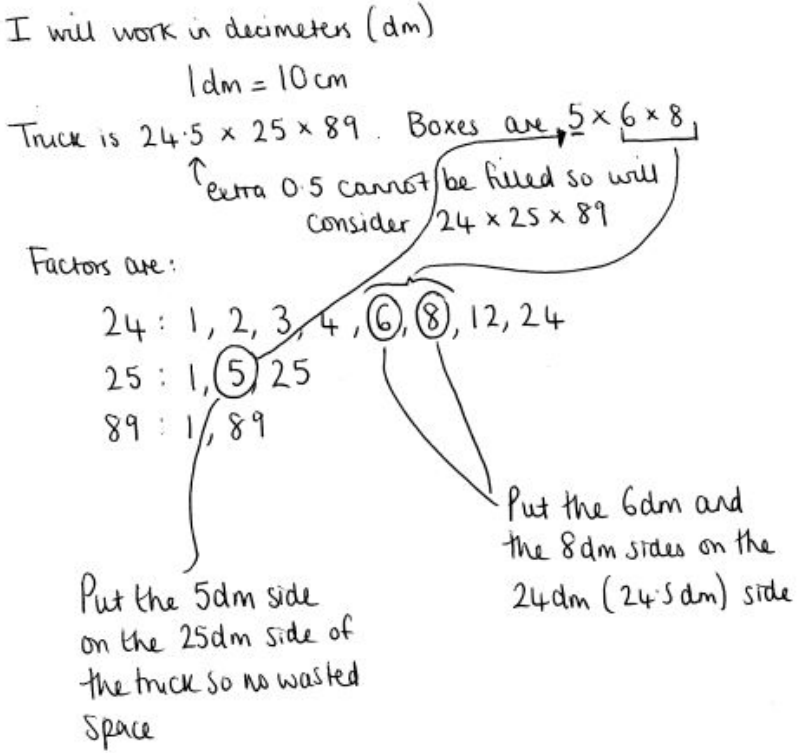
Google Form will have your response recorded for these questions.

Student LEILAH: Explain how she started to pack the truck. *

Your answer

Student LEILAH: Do you Agree or Disagree with her answer. Explain why or why not. *

Sample Responses to Discuss: Faridah



Google Form will have your response recorded for these questions.

Student FARIDAH Explain how she started to pack the truck. *

Your answer

Student FARIDAH What ADVANTAGE did her solution have? *

Your answer

Student FARIDAH: Do you Agree or Disagree with her answer. Explain why or why

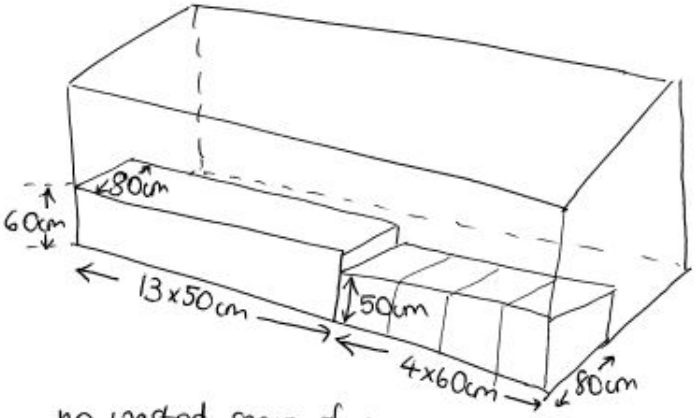
Sample Responses to Discuss: Moses

$4 \times 60cm = 240cm$

$13 \times 50cm = 650cm$

$890cm$

$4 + 13 = 17$ boxes altogether



no wasted space along the longest side

Then repeat this pattern enough times to fill the rest of the space.

Google Form will have your response recorded for these questions.

Student MOSES: Explain how he started to pack the truck. *

Your answer

Student MOSES: What STRENGTH did his solution provide? *

Your answer

Student MOSES: What WEAKNESS did his solution provide? *