Math Virtual Learning

6th Grade Math

MAP Mystery- Geometry Review

May 22, 2020

6th Grade Math
Lesson: May 22, 2020

Objective/Learning Target:

Students will review sixth grade math standards for geometry.

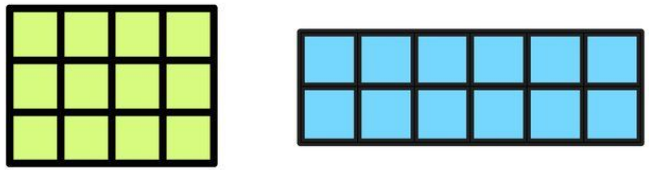
Warm Up Activity

TWO TRUTHS, ONE LIE

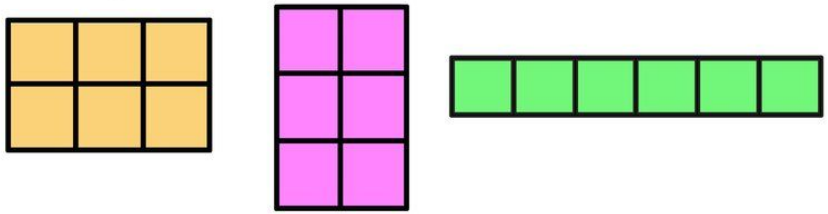
Which of the three statements below is a lie?
Explain how you made your choice.

Each ☐ is one square unit in all of the figures below.

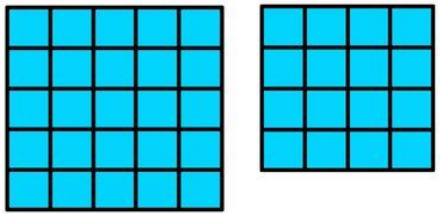
(1) These figures have the same area.



(2) These figures have the same Area.



(3)



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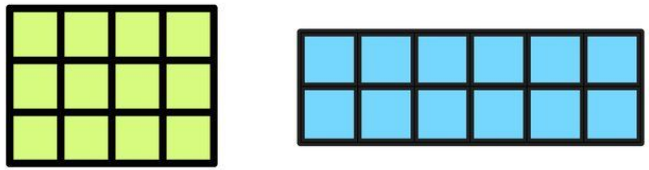

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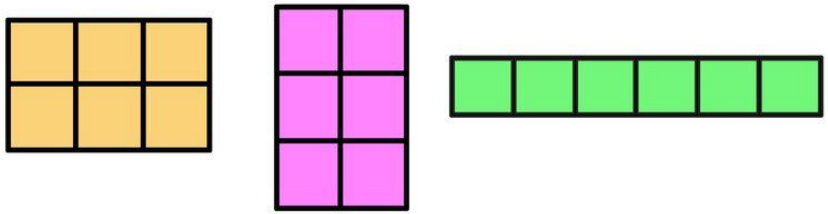

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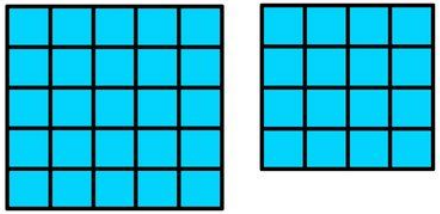


3. Is the lie because the first shape has an area of 25 units squared and the second shape has an area of 14 sq units.

Lesson Videos

Points on the Coordinate Plane

Intro to Volume

Surface Area using a net: Triangular Prism

Surface Area of a Box

MAP Mystery Day 3

As you go throughout the review this week, use this link to type and check your answers:

MAP Mystery Sites

Please click on Day 3 to type in your answers for today.

Practice # 1

RECREATE THE SCENE

Point T is the Trophy Case. Give its coordinates:

_____

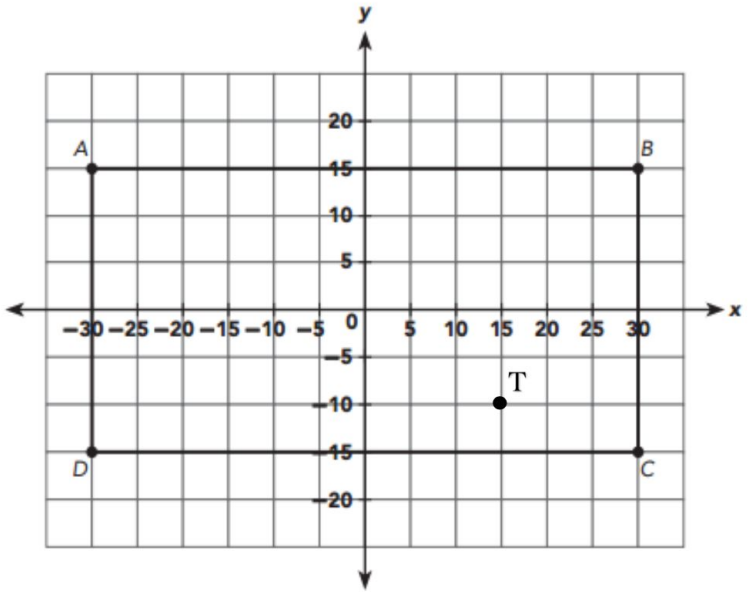
The entrances to the room are at A (15, 15) and B (-30, -10). Plot these two entrances and list how far are each from the Trophy Case.

Entrance A: _____

Entrance B: _____

There's a window that is on wall DC and 15 feet from point C. Plot this window and give its coordinates: _____

How far is it from the Trophy Case? _____



The laser detectors are at points (20, 5), (25, -10), (-5,-10). Plot these points. How much area do the laser detectors cover? _____

What is the area of the room? _____

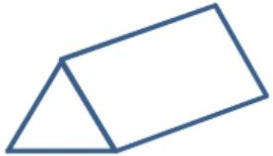
Based on the evidence, which how did the culprit get into the room? _____

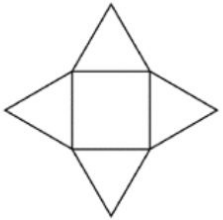
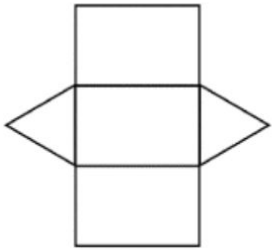
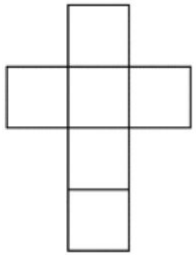
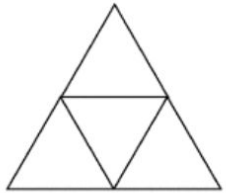
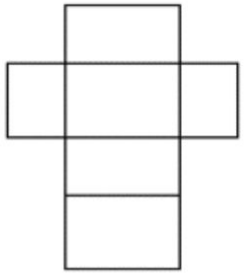
Practice # 2

TROPHY BOX

A bunch of cardboard was found in the dumpster behind the stadium that detectives suspect were part of a box used to smuggle the trophy out. Name the figure formed by each cardboard shape (net) and match it to the correct three-dimensional drawing.



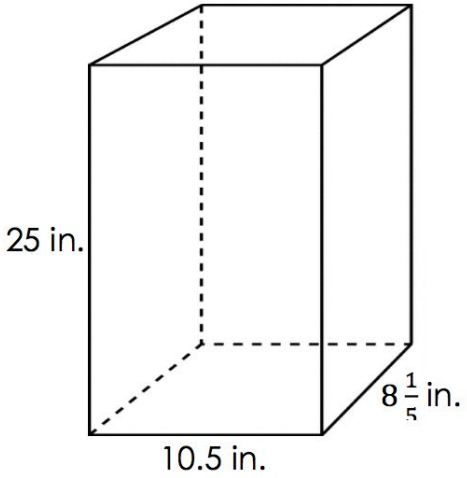







_____ _____ _____ _____ _____

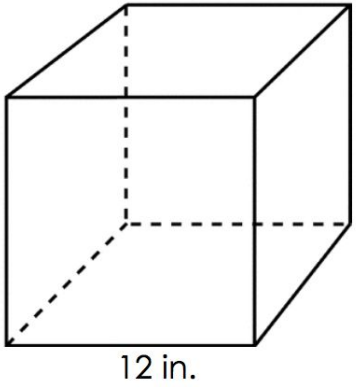
Practice # 3

VOLUME OF THE BOX

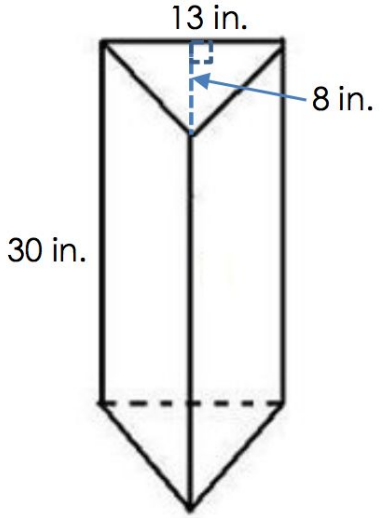
Based on the shape of the trophy, it is most likely that the box used by the culprit was shaped like a cube, rectangular prism, or triangular prism. Find the volume of each cardboard box to determine which one was used?



Volume: _____



Volume: _____



Volume: _____

The trophy has a volume of 1,500 in.^{3}. Which box did the culprit use? _____

Practice # 4

CREATING THE BOX

Managers at local hardware stores have identified certain transactions that could link the material used to create the box with a specific purchase. Each purchase was for a different amount of cardboard. Find the surface area of the box to identify which purchase

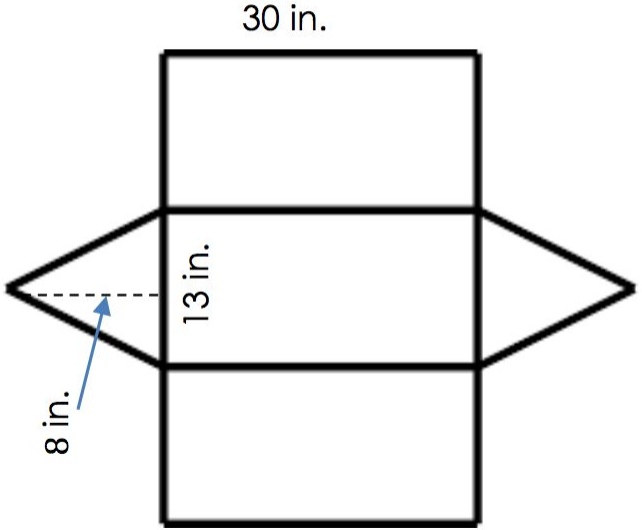
was made by the culprit.

HOME DEPOT– 1,378 in.^{2} LOWES– 1,274 in.^{2}

SUTHERLANDS– 1,164 in.^{2} WAL MART– 537

At which store did the culprit purchase the cardboard?

_____



MAP Mystery Final Conclusions

MAP Mystery Sites

Please click on Final Conclusions to type in your summary of what happened in this crime.

Summary/Reflection

Describe the difference of surface area and volume.

Why would finding the volume of an object be important?

Additional Practice:

Click on the link below to get additional practice and to check your understanding!

Practice:

Khan Academy: Coordinate Plane Practice

Khan Academy: Volume Practice

IXL: Triangular Surface Area Practice

IXL: Rectangular Surface Area Practice