

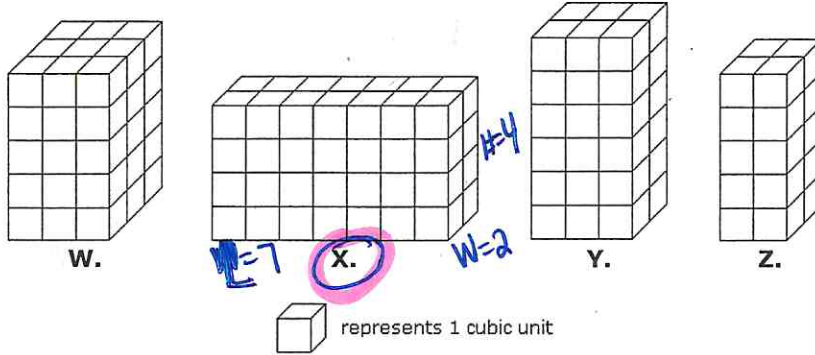
Benchmark 2 Study Guide- Units 5-7

odd #'s: 1, 3, 5, 7, 9, 11, 13, 15
 Pg 1

Question 1.

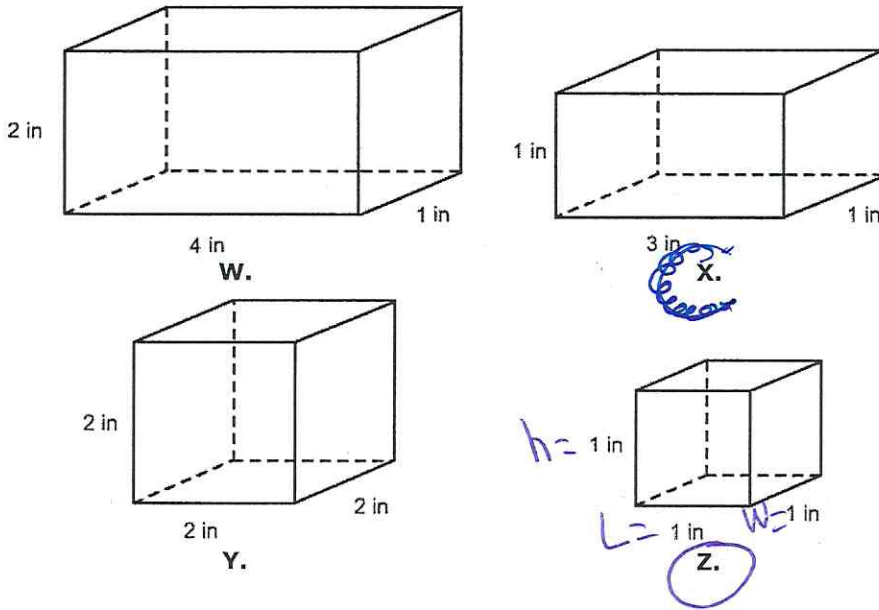
The prisms given below are packed with unit cubes. Which of these prisms has a volume equal to 56 cubic units?

$7 \times 8 = 56$
 $7 \times 2 \times 4$



Question 2.

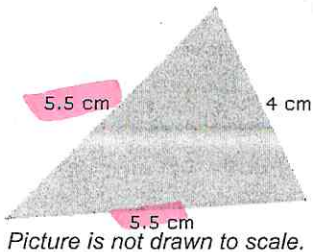
Which figure is a unit cube?



- A. Y
- B. Z**
- C. X
- D. W

Question 3.

The triangle fits which of the following classifications?



- I. Equilateral
- II. Right
- ✓ III. Acute = ALL angles $< 90^\circ$
- ✓ IV. Isosceles = 2 sides equal

- A. III only
- B. III and IV**
- C. I and IV
- D. II and III

Question 7 .

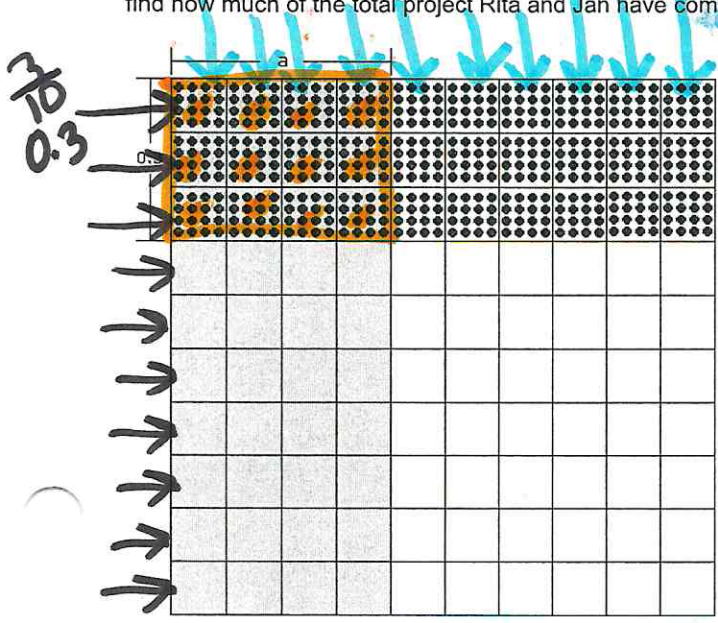
$2.6 \times 2.6 = 6.76$

Using the multiplication equation above, solve the division equation below.

$6.76 \div 2.6 = ?$ *2.6*

Question 8 .

Rita and Jan are working on a school project together. Rita has completed 0.3 of her portion, and Jan has completed a portion as well. Use the model to complete the equation below and find how much of the total project Rita and Jan have completed.



$\frac{4}{10} = 0.\frac{4}{10}$

$0.3 \times \boxed{0.4} = \boxed{}$

Rita and Jan have completed $\boxed{0.12}$ of the total project.

$\frac{12}{100}$
 $0.\frac{12}{100}$

$$\begin{array}{r} \cancel{0.3} \\ \times \cancel{0.4} \\ \hline 12 \\ \uparrow \\ .12 \end{array}$$

Question 9 .

Using the least number of prisms below, choose the prisms that could be joined together to have a volume of 68 cubic units.

A

 $w=3$
 $L=3$
 $h=2$
 $V=36$
 12×3
 12×3

B

 $w=1$
 $L=4$
 $h=1$
 $V=4$

C

 $L=4$
 $w=4$
 $h=4$
 $V=64$

D

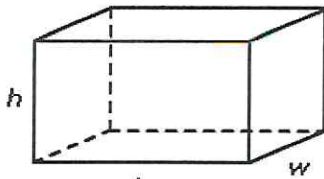
 $L=2$
 $w=2$
 $h=5$
 $V=20$

E

 $w=2$
 $L=2$
 $h=3$
 $V=12$

Question 10 .

In the rectangular prism above, $l = 31$ inches, $w = 15$ inches, and $h = 16$ inches. What is the volume of the rectangular prism?



$V = 7,440$ cubic inches
 $V = 7,440$ inches cubed

HTO $31 \times 15 \times 16$
 240
 $\times 31$
 $\hline 240$
 31×240

HTO 30
 15
 $\times 16$
 $\hline 190$
 $+ 150$
 $\hline 240$

Question 11 .

A right rectangular prism has a square base with side lengths of 3 inches and a height of 9 inches. What is the volume of the right rectangular prism?

81 in^3

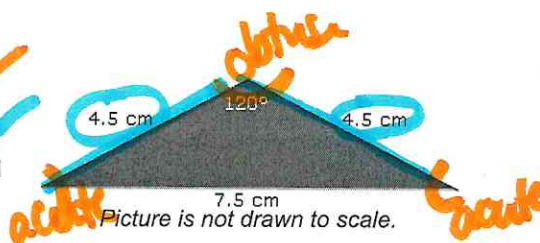
$w = 3 \text{ in}$
 $l = 3 \text{ in}$



Question 12 .

The triangle fits which of the following classifications?

- I. Obtuse
- II. Isosceles
- III. Equilateral
- IV. Scalene



- A. I and II
- B. II and III
- C. II only
- D. II and IV

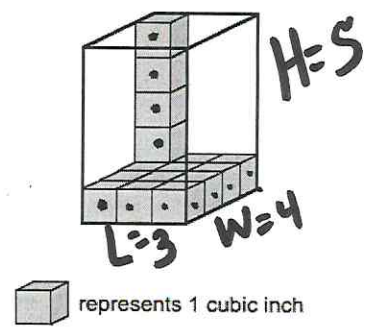
Question 13 .

The rectangular prism shown below is packed with unit cubes with side length 1 inch.

What is the volume of the rectangular prism when it is fully packed if there are no gaps or overlaps in the unit cubes?

- 60 in³
 - 60 cubic inches
 - 60 inches cubed

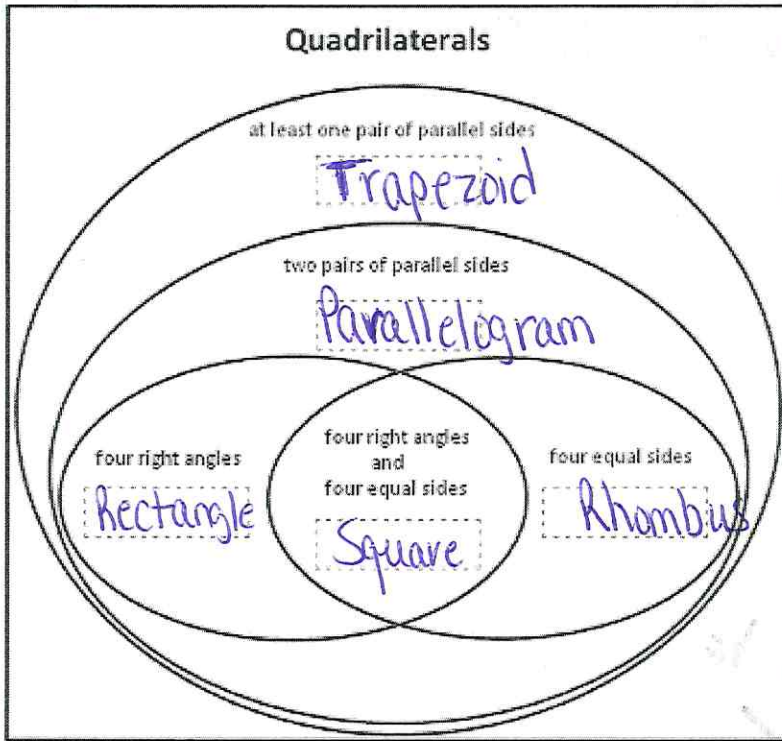
- A. 12 cubic inches
- B. 40 cubic inches
- C. 30 cubic inches
- D. 60 cubic inches



Question 14 .

Complete the Venn diagram below by placing the correct terms in the boxes.

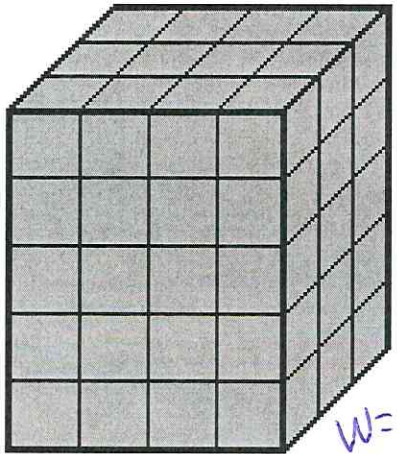
parallelogram trapezoid pentagon rectangle triangle square rhombus



Question 15 .

This rectangular prism is packed with 60 unit cubes, without any gaps or overlaps.

What is the volume of this rectangular prism?



$L = 4$

$W = 3$

$H = 5$

60 u³
60 unit cubes
60 cubic units

$V = L \times w \times h$

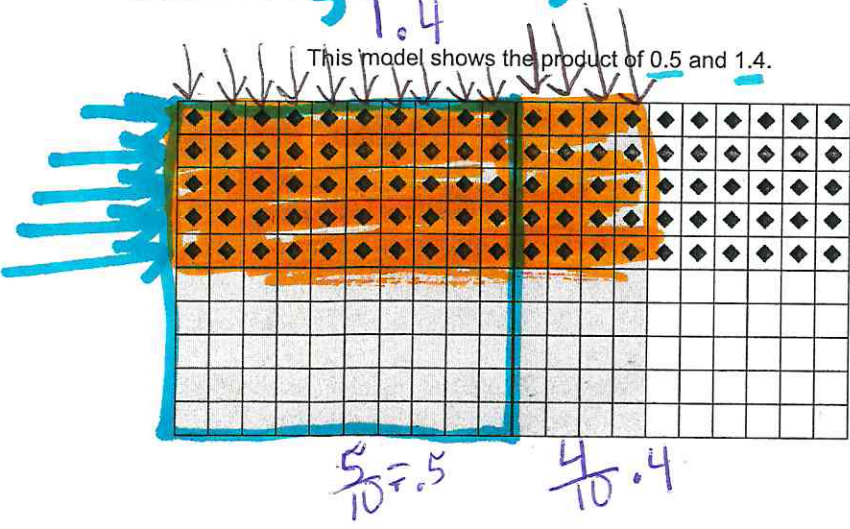
$4 \times 3 \times 5 = 60$ unit cubes
 $12 \times 5 = 60$

Question 16.

50 dots + 30 dots = $\frac{70}{100}$
 1.4

0.70

This model shows the product of 0.5 and 1.4.

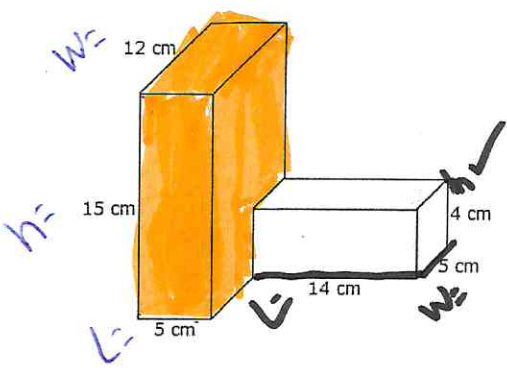


Which equation shows the product of 0.5 and 1.4?

- A. $0.5 \times 1.4 = 7$
- B. $0.5 \times 1.4 = 0.19$
- C. $0.5 \times 1.4 = 0.70$
- D. $0.5 \times 1.4 = 1.9$

Question 17.

Mia's new desktop caddy is made of two rectangular prisms as shown below.



Complete the equation that can be used to find the total volume of the desktop caddy.

$(15 \text{ cm} \times 12 \text{ cm} \times 5 \text{ cm}) + (4 \text{ cm} \times 5 \text{ cm} \times 14 \text{ cm}) = \text{ } \text{ cu cm}$

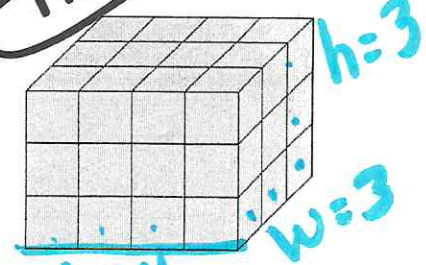
Handwritten calculations for Question 17:

- A vertical multiplication: $60 \times 15 = 900$
- A calculation: $900 \text{ cm}^3 + 280 \text{ cm}^3 = 1180 \text{ cm}^3$
- A diagram of a square with side length w .

Question 18.

The rectangular prism is packed with 36 unit cubes, without any gaps or overlaps.

The volume of the rectangular prism is \square cubic units.



Handwritten calculation for Question 18:

$$4 \times 3 \times 3 = 12 \times 3 = 36$$