6th Grade Math Packet

May 4-May 14

This Packet Includes:

- Practice Section
- Extra Section
- Answer Section
- Check Up Section (ONLY THING NEEDED TO TURN IN)

The only thing we ask for you to return via bus or emailing a picture to your teacher are the first pages labeled "Check Up" How much of the rest of the packet depends on what is best for you. Included are notes for you to read over and problems to practice. The answers are in the back to check if you are being successful.

If you have online available to you, please join our Google Classrooms where we will be posting videos and tips to help you. Log into Google Classroom using your school address and password. Then join YOUR teacher's classroom using the code.

Mrs. StPeter's code: cphpbko Miss VanBoven's code: y3xbej6

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Possible Schedule

May 4: Read 7.4 Notes and 7.4 Check For Understanding

May 5: 7.5 Notes and 7.5 Check For Understanding

May 6: 7.7 Notes and 7.5 Check For Understanding

May 7: 8.1 Notes and 8.1 Check For Understanding

May 8: 8.2 Notes and 8.1 Check For Understanding

*Add extra material (puzzles, games, and projects through out)

May 11: 8.3 Notes and 8.3 Check For Understanding

May 12: 8.4 Notes and 8.4 Check For Understanding

May 13: Complete the Check Up using notes.

May 14: Double check all Check Up problems and email or send back on the bus.

May 15: PLAY GAMES with the family! ☺

PRACTICE SECTION

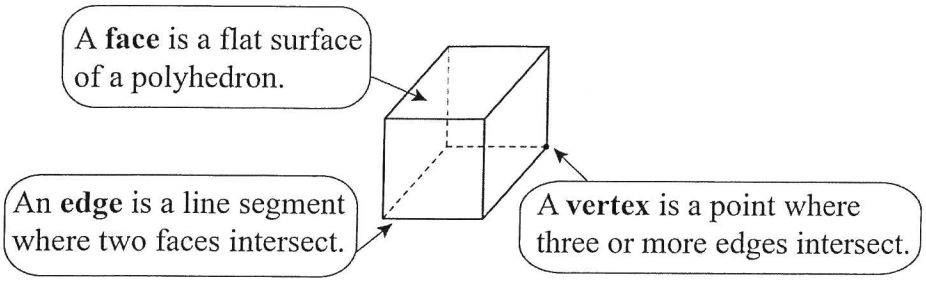
Notes

Check Understandings

Puzzles

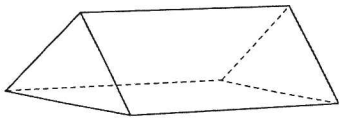
7.4 Notes

A **solid** is a three-dimensional figure that encloses a space. **A polyhedron** is a solid whose faces are all polygons.



EXAMPLE Finding the Numbers of Faces, Edges, and Vertices

Find the numbers of faces, edges, and vertices of the solid.



Count the number of flat surfaces of the solid. There are 2 triangular faces and 3 rectangular faces.

Count the number of line segments formed by the intersection of two faces. The faces intersect at 9 different line segments.

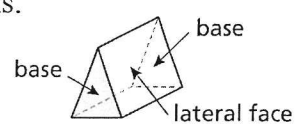
Count the number of points where three or more edges intersect. The edges intersect at 6 different points.

▶ So, the solid has 5 faces, 9 edges, and 6 vertices.

Key Ideas

Prisms

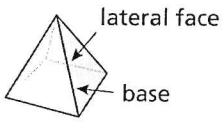
A **prism** is a polyhedron that has two parallel, identical *bases*. The *lateral faces* are parallelograms.



Triangular Prism

Pyramids

A **pyramid** is a polyhedron that has two bases. The lateral faces are triangles.



Rectangular Pyramid

The shape of the base tells the name of the prism or the pyramid.

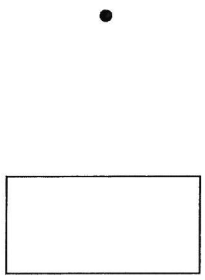
Name _____ Date _____

EXAMPLE Drawing a Solid

Draw a rectangular pyramid.

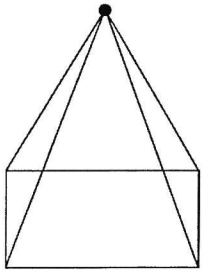
Step 1:

Draw a rectangular base and a point



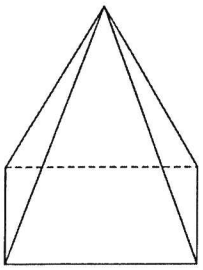
Step 2:

Connect the vertice of the rentangle to the point.



Step 3:

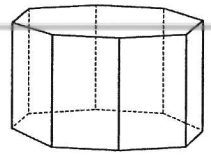
Change any *hidden* lines to dashed lines.



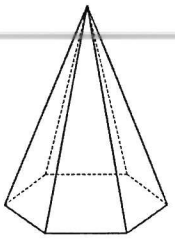
Check Your Understanding

Find the numbers of faces, edges, and vertices of the solid.

1.



2.



3. Draw a rectangular prism

4. Draw an octagonal (8 sided) pyramid

Name _____ Date _____

7.4 Puzzle Time

What Do You Get When You Cross An Elephant With A Fish?

Write the letter of each answer in the box containing the exercise number.

Identify the solid that is described.

1. One pentagonal base and five lateral faces that are triangles
2. One rectangular base and four lateral faces that are triangles
3. Two parallel, triangular bases and three lateral faces that are rectangles
4. Two parallel, pentagonal bases and five lateral faces that are rectangles
5. Two parallel, square bases and four lateral faces that are squares
6. Two parallel, rectangular bases and four lateral faces that are rectangles
7. One triangular base and three lateral faces that are triangles

Determine the correct number.

8. The number of vertices on a cube
9. The number of lateral faces on a triangular prism
10. The number of lateral faces on a pentagonal prism
11. The number of vertices on a pentagonal pyramid
12. The number of vertices on a triangular pyramid
13. The number of edges on a rectangular prism
14. The number of vertices on a pentagonal prism

Answers for Exercises 1–7

S. Pentagonal Prism

G. Triangular Pyramid

N. Pentagonal Pyramid

R. Rectangular Prism

I. Rectangular Pyramid

M. Cube

U. Triangular Prism

Answers for Exercises 8–14

K. 6

I. 8

T. 12

S. 5

M. 4

W. 10

N. 3

10	14	8	5	12	2	9	7		13	6	3	1	11	4

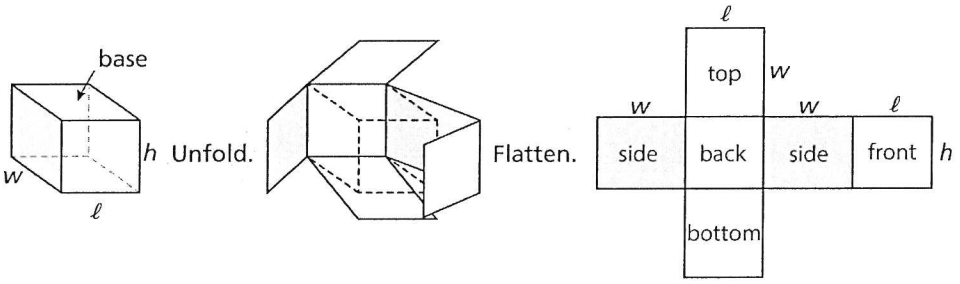
7.5 Notes

The **surface area** of a solid is the sum of the areas of its faces. You can use a two-dimensional representation of a solid, called a **net**, to find the surface area of the solid. Surface area is measured in *square units*.

Key Idea

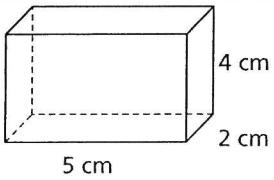
Net of a Rectangular Prism

A *rectangular prism* is a prism with rectangular bases.



EXAMPLE Finding the Surface Area of a Rectangular Prism

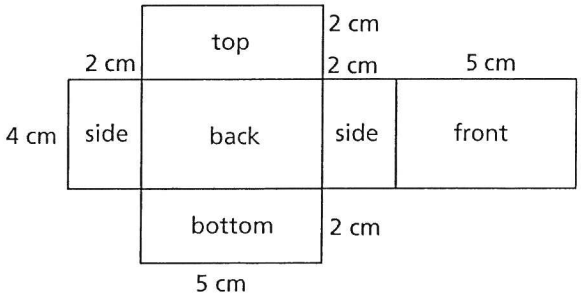
Find the surface area of the rectangular prism.



Use a net to find the area of each face.

All the faces are rectangles, so you can find the area of each face by multiplying length and width.

Top: $5 \cdot 2 = 10$
Bottom: $5 \cdot 2 = 10$
Front: $5 \cdot 4 = 20$
Back: $5 \cdot 4 = 20$
Side: $2 \cdot 4 = 8$
Side: $2 \cdot 4 = 8$



Find the sum of the areas of the faces.

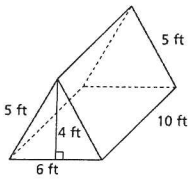
$$\begin{pmatrix}\text{Surface}\\ \text{Area}\end{pmatrix} = \begin{pmatrix}\text{Area of}\\ \text{top}\end{pmatrix} + \begin{pmatrix}\text{Area of}\\ \text{bottom}\end{pmatrix} + \begin{pmatrix}\text{Area of}\\ \text{front}\end{pmatrix} + \begin{pmatrix}\text{Area of}\\ \text{back}\end{pmatrix} + \begin{pmatrix}\text{Area of}\\ \text{a side}\end{pmatrix} + \begin{pmatrix}\text{Area of}\\ \text{a side}\end{pmatrix}$$

$$S = 10 + 10 + 20 + 20 + 8 + 8$$
$$= 76$$

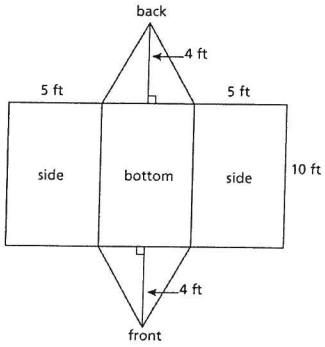
▶ So, the surface area is 76 square centimeters.

EXAMPLE Finding the Surface Area of a Triangular Prism

Find the surface area of the triangular prism.



Use a net to find the area of each face.



$$\begin{aligned} \text{Bottom: } & 6 \cdot 10 && = 60 \\ \text{Front: } & \tfrac{1}{2} \cdot 6 \cdot 4 && = 12 \\ \text{Back: } & \tfrac{1}{2} \cdot 6 \cdot 4 && = 12 \\ \text{Side: } & 5 \cdot 10 && = 50 \\ \text{Side: } & 5 \cdot 10 && = 50 \end{aligned}$$

Find the sum of the areas of the faces.

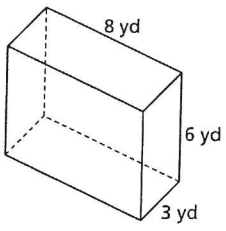
$$\begin{pmatrix}\text{Surface}\\ \text{Area}\end{pmatrix} = \begin{pmatrix}\text{Area of}\\ \text{bottom}\end{pmatrix} + \begin{pmatrix}\text{Area of}\\ \text{front}\end{pmatrix} + \begin{pmatrix}\text{Area of}\\ \text{back}\end{pmatrix} + \begin{pmatrix}\text{Area of}\\ \text{a side}\end{pmatrix} + \begin{pmatrix}\text{Area of}\\ \text{a side}\end{pmatrix}$$

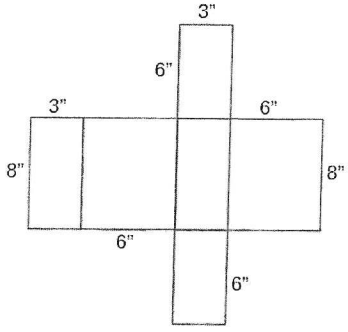
$$\begin{aligned} S &= 60 + 12 + 12 + 50 + 50 \\ &= 184 \end{aligned}$$

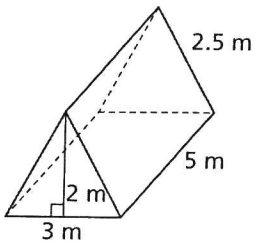
▶ So, surface area is 184 square feet.

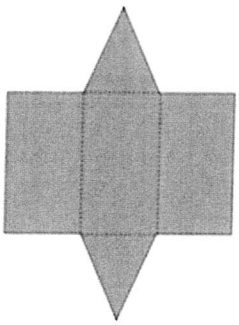
Check Your Understanding

Use the net to find the surface area of each solid









Name _____ Date _____

7.5 Puzzle Time

What Do You Call A Person Who Makes Faces All Day Long?

Write the letter of each answer in the box containing the exercise number.

Find the surface area of the prism.

1. A cube that has side lengths measuring 9 inches
2. A cube that has side lengths measuring 7 inches
3. A rectangular prism that measures 6 inches by 8 inches by 4 inches
4. A rectangular prism that measures 3 inches by 5 inches by 10 inches
5. A rectangular prism that measures 7 inches by 7 inches by 4 inches
6. A rectangular prism that measures 3 inches by 6 inches by 12 inches
7. A rectangular prism that measures 2 inches by 5 inches by 8 inches
8. A triangular prism with bases that are right triangles measuring 5 inches by 12 inches by 13 inches; The height of the prism is 2 inches.
9. A triangular prism with bases that are right triangles measuring 7 inches by 24 inches by 25 inches; The height of the prism is 3 inches.
10. A triangular prism with bases that have a base of 16 inches, legs that are 10 inches, and a height of 6 inches; The height of the prism is 11 inches.
11. A triangular prism with bases that have a base of 18 inches, legs that are 15 inches, and a height of 12 inches; The height of the prism is 7 inches.

Answers

M. 190 in.^{2}

E. 208 in.^{2}

C. 552 in.^{2}

L. 210 in.^{2}

R. 492 in.^{2}

C. 120 in.^{2}

K. 132 in.^{2}

O. 294 in.^{2}

A. 486 in.^{2}

A. 336 in.^{2}

K. 252 in.^{2}

1		8	5	2	11	7	4	9	6	3	10

7.7 Notes: Volume of a Rectangular Prism

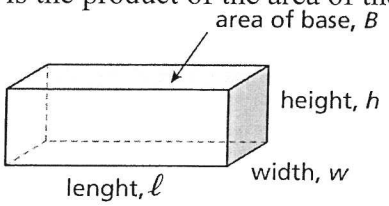
Key Idea

Words

The volume V of a rectangular prism

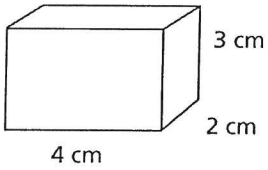
The volume of a rectangular prism is the product of the area of the base and the height of the prism.

Algebra: $V = Bh$ or $V = \ell wh$



EXAMPLE Finding the Volume of a Rectangular Prism

Find the volume of the prism.



$V = \ell wh$ Write the formula for the volume of a rectangular prism.

$= (4)(2)(3)$ Substitute 4 for ℓ, 2 for w, and 3 for h.

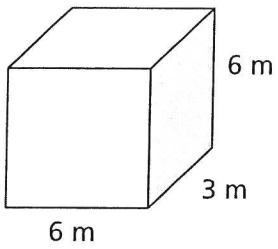
$= 24$ Multiply.

▶ So, the volume is 24 cubic centimeters.

Check Your Understanding

Find the volume of the prism.

1.



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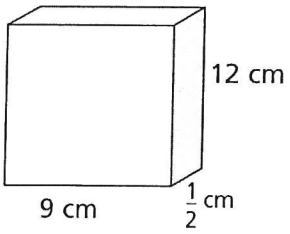


Name _____ Date _____

7.7 Puzzle Time

What Did The Necktie Say To The Hat?

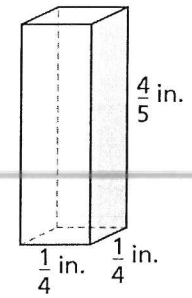
A	B	C	D	E	F
G	H				

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

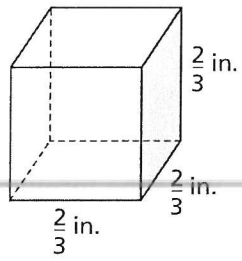
3 in. WILL	$\frac{8}{27}$ in.^{3} GO
5 in. AROUND	13 in. HANG
$\frac{1}{20}$ in.^{3} YOU	8 in. JUST
$10\frac{2}{3}$ in.^{3} I	$\frac{25}{28}$ in.^{3} AHEAD

Find the volume of the rectangular prism.

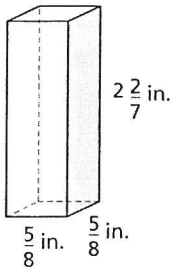
A.



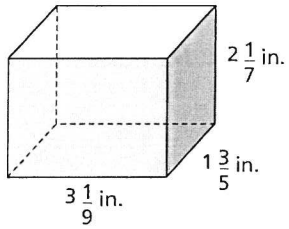
B.



C.

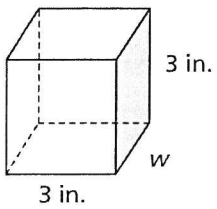


D.

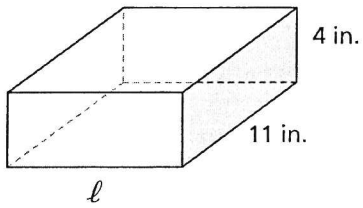


Find the missing dimension of the prism.

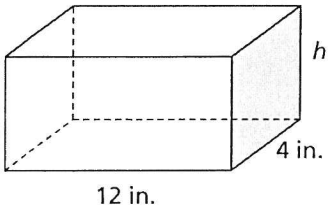
E. $V = 27$ in.^{3}



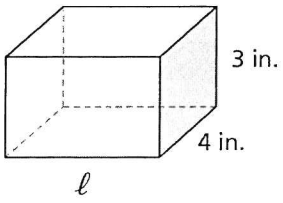
F. $V = 352$ in.^{3}



G. $V = 624$ in.^{3}



H. $V = 60$ in.^{3}



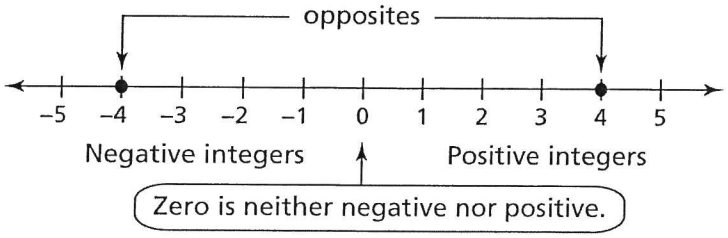
8.1 Notes

Key Idea

Integers

Words **Integers** are the set of whole numbers and their opposites.

Graph



Words like *increase*, *gain*, *above*, *earns*, and *up* indicate a positive integer.

Words like *decrease*, *lose*, *below*, *debt*, and *down* indicate a negative integer.

EXAMPLE Writing Positive and Negative Integers

Write a positive or negative integer that represents each situation.

a. You deposit $45 in your savings account.

Deposit indicates a number greater than 0.
You are adding an amount.
So, use a positive integer.

▶ +45, or 45

b. You lose 300 points in a video game.

Lose indicates a number less than 0.
Points are taken away.
So, use a negative integer.

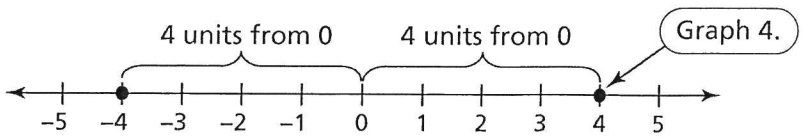
▶ −300

To graph an integer and its opposite, first graph the given integer.
Then, graph the integer on the opposite side of 0 that is the same distance from 0 as the given integer.

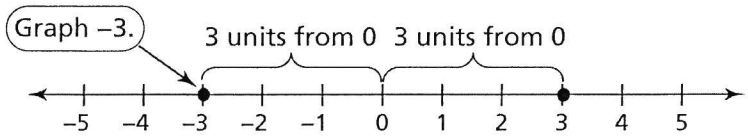
EXAMPLE Graphing Integers

Graph each integer and its opposite.

a. 4



b. -3



Check Your Understanding

Write a positive or negative integer that represents the situation.

1. You earn 15 points of extra credit on your quiz.

2. The temperature yesterday was 8 degrees below zero.

Graph the integer and its opposite.

3. -1

4. 5

Name _____ Date _____

8.1 Puzzle Time

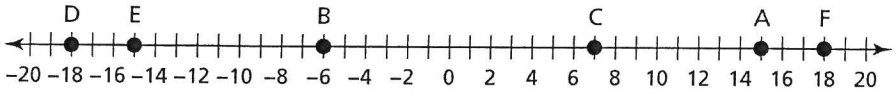
What Do You Get When You Cross An Electrical Eel With A Sponge?

Write the letter of each answer in the box containing the exercise number.

Write a positive or negative integer that represents the situation.

1. Lisa puts 14 dollars into her piggy bank.
2. You are playing a game and must go back 4 spaces.
3. Claire loses 5 points on a spelling test.
4. The football team scores 21 points in the game.
5. Your dad gains 5 pounds.
6. Addison gets 4 bonus points on the science test.
7. The temperature drops 14 degrees.
8. You take 21 dollars out of your bank account.

Identify the location of the point on the number line.



9. A
10. B
11. C
12. D
13. E
14. F

Answers

O. 21
A. −18
R. −4
K. −14
B. −6
S. 7
B. 18
H. −5
O. 4
S. 14
C. −15
R. −21
S. 5
E. 15

11	3	6	13	7		12	10	1	4	8	14	9	2	5

8.2 Notes

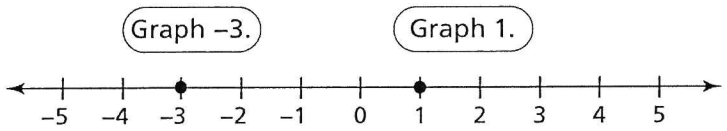
On a horizontal number line, numbers to the left are less than numbers to the right. Numbers to the right are greater than numbers to the left.

On a vertical number line, numbers below are less than numbers above. Numbers above are greater than numbers below.

EXAMPLE Comparing Integers

a. Compare 1 and −3.

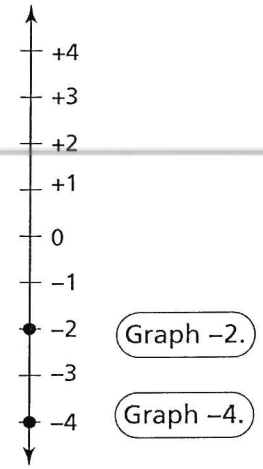
Graph each number on a horizontal number line.



▶ 1 is to the right of −3. So $1 > -3$.

b. Compare −4 and −2.

Graph each number on a vertical number line.

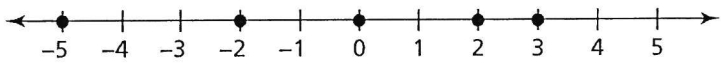


▶ −4 is below −2. So, $-4 < -2$.

EXAMPLE Ordering Integers

Order −5, 0, 2, −2, 3 from least to greatest.

Graph each integer on a number line.



Write the numbers as they appear on the number line from left to right.

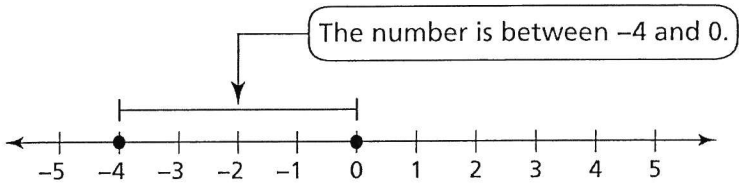
▶ So, the order from least to greatest is −5, −2, 0, 2, 3.

EXAMPLE Reasoning with Integers

A number is greater than −4 and less than 0. What is the greatest possible integer value of this number?

A. −5 **B.** −2 **C.** −1 **D.** 3

The number must be to the right of −4 and to the left of 0 on a horizontal number line.



The greatest possible integer value between –4 and 0 is the integer farthest to the right of these values on the number line, which is –1.

▶ So, the correct answer is **C**.

Check Your Understanding

Copy and complete the statement using < or >.

1. $-7 \_\_\_\_ 7$ **2.** $3 \_\_\_\_ -1$ **3.** $-2 \_\_\_\_ -4$

Order the integers from least to greatest.

4. 3, –6, 6, 9, –9 **5.** 5, –2, –4, –7, 3

Name _____ Date _____

8.2 Puzzle Time

Did You Hear About The...

A	B	C	D	E	F
G	H	I	J	K	L
M					

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

Which number is greater?

A. 4, 1

B. 7, −7

C. −2, 5

D. −8, −9

E. −4, −3

F. −6, −11

Order the integers from least to greatest.

G. 2, −6, 0, −3

H. −4, 6, −5, 1

I. 7, −7, 17, −17

J. −2, −5, −1, −4

K. 3, −3, −13, −33

L. 0, −8, 60, −68

M. After the first round on a television game show, the three contestants have −$300, $600, and −$400 respectively. Which of the three dollar amounts represents the lowest score in the game?

−5, −4, 1, 6 GOT	0, −8, 60, −68 RAN
−7, −17, 7, 17 LIFT	−33, −13, −3, 3 AT
−3, 3, −13, −33 DOWN	−400 GYM
−1, −2, −4, −5 WHEN	5 WERE
−6 BECAUSE	−3, −6, 0, 2 EARLY
−300 EXERCISE	−3 LATE
4 DUMBBELLS	−6, −3, 0, 2 THEY
−5, −4, −2, −1 UP	7 THAT
−8 ALWAYS	−17, −7, 7, 17 HELD
−68, −8, 0, 60 THE	−11 WEIGHTS

8.3 Notes

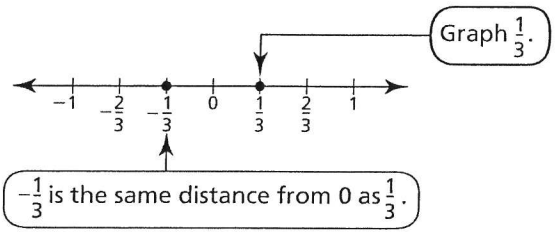
A **rational number** is a number that can be written as $\frac{a}{b}$, where a and b are integers and $b \neq 0$. The set of rational numbers is made up of integers, fractions, and decimals.

To graph a rational number and its opposite, first graph the given rational number. Then, graph the rational number on the opposite side of 0 that is the same distance from 0 as the given rational number.

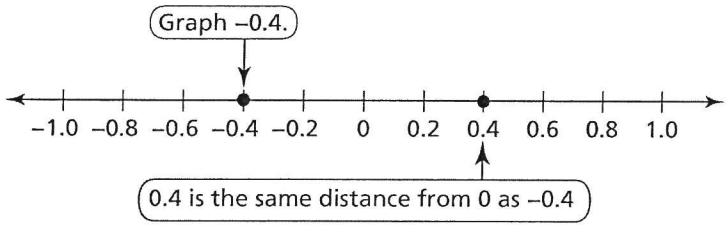
EXAMPLE Graphing Rational Numbers

Graph each number and its opposite.

a. $\frac{1}{3}$



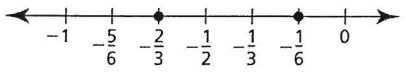
b. -0.4



EXAMPLE Comparing Fractions and Mixed Numbers

a. Compare $-\frac{1}{6}$ and $-\frac{2}{3}$.

Graph $-\frac{1}{6}$ and $-\frac{2}{3}$ on a number line.

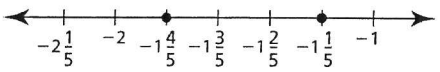


$-\frac{2}{3}$ is to the left of $-\frac{1}{6}$.

▶ So, $-\frac{2}{3} < -\frac{1}{6}$.

b. Compare $-1\frac{1}{5}$ and $-1\frac{4}{5}$.

Graph $-1\frac{1}{5}$ and $-1\frac{4}{5}$ on a number line.



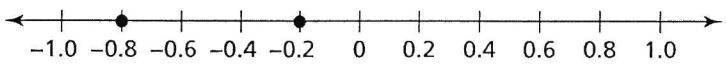
$-1\frac{1}{5}$ is to the right of $-1\frac{4}{5}$.

▶ So, $-1\frac{1}{5} > -1\frac{4}{5}$.

Example Comparing Decimals

a. Compare −0.8 and −0.2.

Graph −0.8 and −0.2 on a number line.

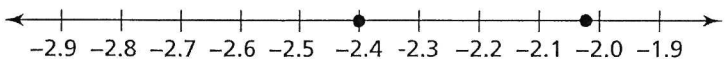


−0.8 is to the left of −0.2.

▶ So, $-0.8 < -0.2$.

b. Compare −2.04 and −2.4.

Graph −2.04 and −2.4 on a number line.



−2.4 is to the left of −2.04.

▶ So, $-2.04 > -2.4$.

Check Your Understanding

Graph the number and its opposite.

1. $\frac{3}{5}$
2. $-1\frac{2}{3}$

Copy and complete the statement using < or >.

3. $-\frac{3}{5} \_\_ -\frac{7}{10}$
4. $-\frac{4}{9} \_\_ -\frac{1}{3}$
5. $-1\frac{1}{2} \_\_ -1\frac{3}{4}$

Name _____ Date _____

8.3 Puzzle Time

What Did One Plate Say To The Other Plate?

Write the letter of each answer in the box containing the exercise number.

Which number is greater?

1. $-\frac{1}{2}, \frac{3}{5}$
2. $-\frac{2}{3}, -\frac{5}{6}$
3. $-5\frac{1}{4}, -5\frac{1}{2}$
4. $-2\frac{7}{8}, -2\frac{3}{4}$
5. 4.8, −4.2
6. −21.5, −21.05
7. −3.07, −3.14

Order the numbers from least to greatest.

8. 3.4, −4, −2.7, 0, −2.85
9. $3, -2\frac{1}{4}, -2\frac{1}{6}, 3\frac{1}{5}, -2\frac{3}{4}$
10. Use a number line to determine which number is between −4.4 and −5.8.

    A. −5.68 **B.** −4.14 **C.** −5.92

11. Use a number line to determine which number is between −2.61 and −5.49

    A. −2.49 **B.** −5.51 **C.** −3.11

Answers

H. $-2\frac{3}{4}, -2\frac{1}{4}, -2\frac{1}{6}, 3, 3\frac{1}{5}$

O. $-\frac{2}{3}$

M. −21.05

N. $\frac{3}{5}$

E. $-2\frac{3}{4}$

N. −3.07

U. A

S. 4.8

L. −4, −2.85, −2.7, 0, 3.4

C. $-5\frac{1}{4}$

I. C

8	10	1	3	9		11	5		2	7		6	4

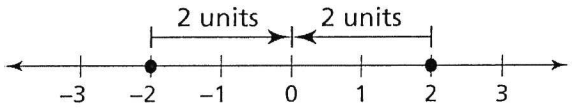
8.4 Notes

Key Idea

Absolute Value

Words The **absolute value** of a number is the distance between the number and 0 on a number line. The absolute value of a number a is written as $|a|$.

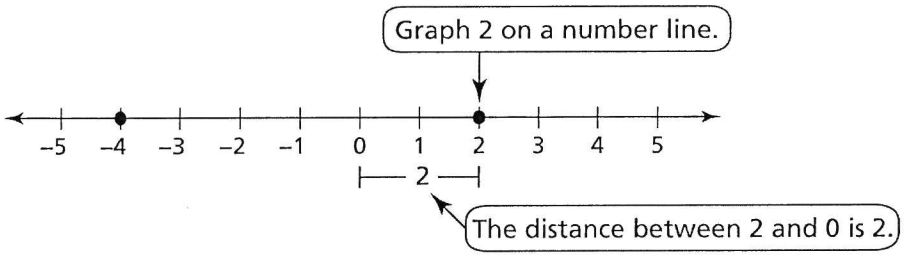
Numbers $|-2| = 2$ $\quad |2| = 2$



To find the absolute value, graph the given number on a number line. Then find the distance between the given number and 0.

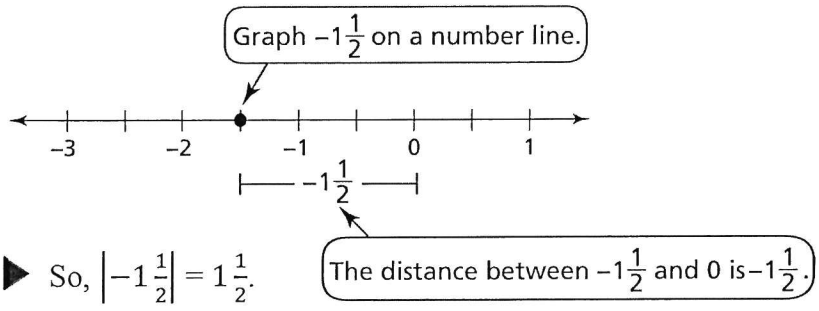
EXAMPLE Finding Absolute Value

a. Find the absolute value of 2.



▶ So, $|2| = 2$.

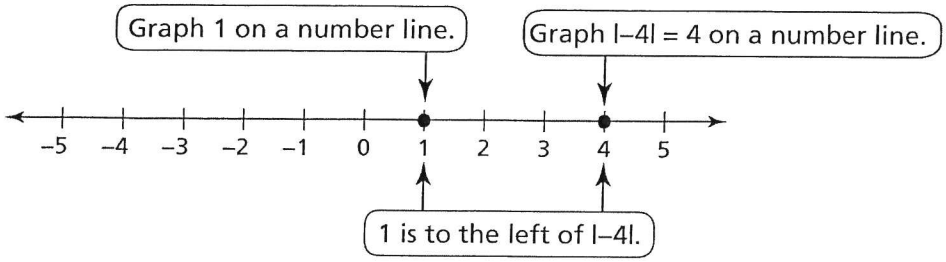
b. Find the absolute value of $-1\frac{1}{2}$.



▶ So, $\left|-1\frac{1}{2}\right| = 1\frac{1}{2}$.

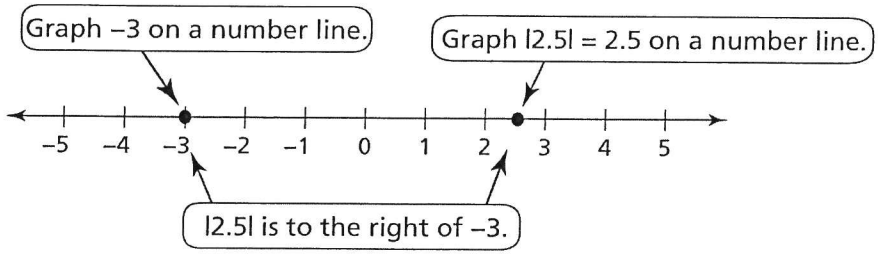
EXAMPLE Comparing Values

a. Compare 1 and |−4|.



▶ So, $1 < |-4|$.

b. Compare |2.5| and −3.



▶ So, $|2.5| > -3$.

Check Your Understanding

Find the absolute value.

1. $|-8|$
2. $|7.5|$
3. $|-\frac{2}{3}|$

Copy and complete the statement using <, >, or =.

4. $|-6.2| \_\_ |7.9|$
5. $12 \_\_ |-12|$

Name _____ Date _____

8.4 Puzzle Time

Did You Hear About The...

A	B	C	D	E	F
G	H	I	J	K	L
M	N	O	P		

Complete each exercise. Find the answer in the answer column. Write the word under the answer in the box containing the exercise letter.

27 BECAME	
−3, −1, |−2|, |−4| IN	
$\frac{1}{8}$ BASEBALL	
−16°F COULD	
−9, −6, 0, |−9| BULL	
12.72 AND	
−2°F BE	
4 MATADOR	
$\frac{6}{7}$ CATCHER	

Find the absolute value.

A. $|-4|$ **B.** $|6|$

C. $|-27|$ **D.** $|18|$

E. $\left|\frac{1}{8}\right|$ **F.** $\left|-4\frac{1}{3}\right|$

G. $|-12.72|$ **H.** $|-9.61|$

Tell which temperature is closest to 0°F.

I. Anchorage: −16°F or Richmond: 46°F

J. Minneapolis: −22°F or New York: 20°F

K. Boston: −2°F or Washington: 38°F

L. Detroit: −19°F or Chicago: −8°F

Order the values from least to greatest.

M. $|-2|, -3, -1, |-4|$

N. $-5, |-7|, -9, |-3|$

O. $-6, 0, |-9|, -9$

P. $|-5|, -5, -3, |-3|$

6 WHO
−8°F FOUND
9.61 HE
−5, −3, |−3|, |−5| PEN
18 A
20°F ALWAYS
−9, −5, |−3|, |−7| THE
$4\frac{1}{3}$ PLAYER
$\frac{2}{3}$ UMPIRE

EXTRAS

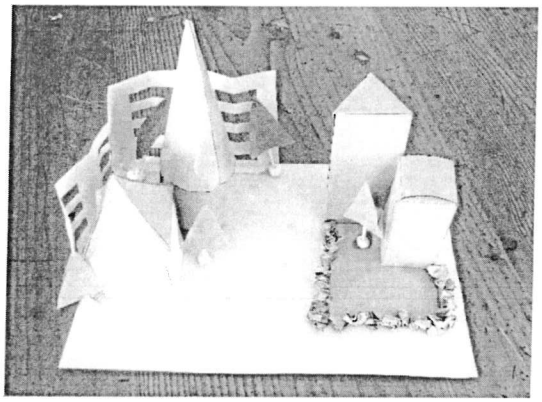
Activities

Games

Projects

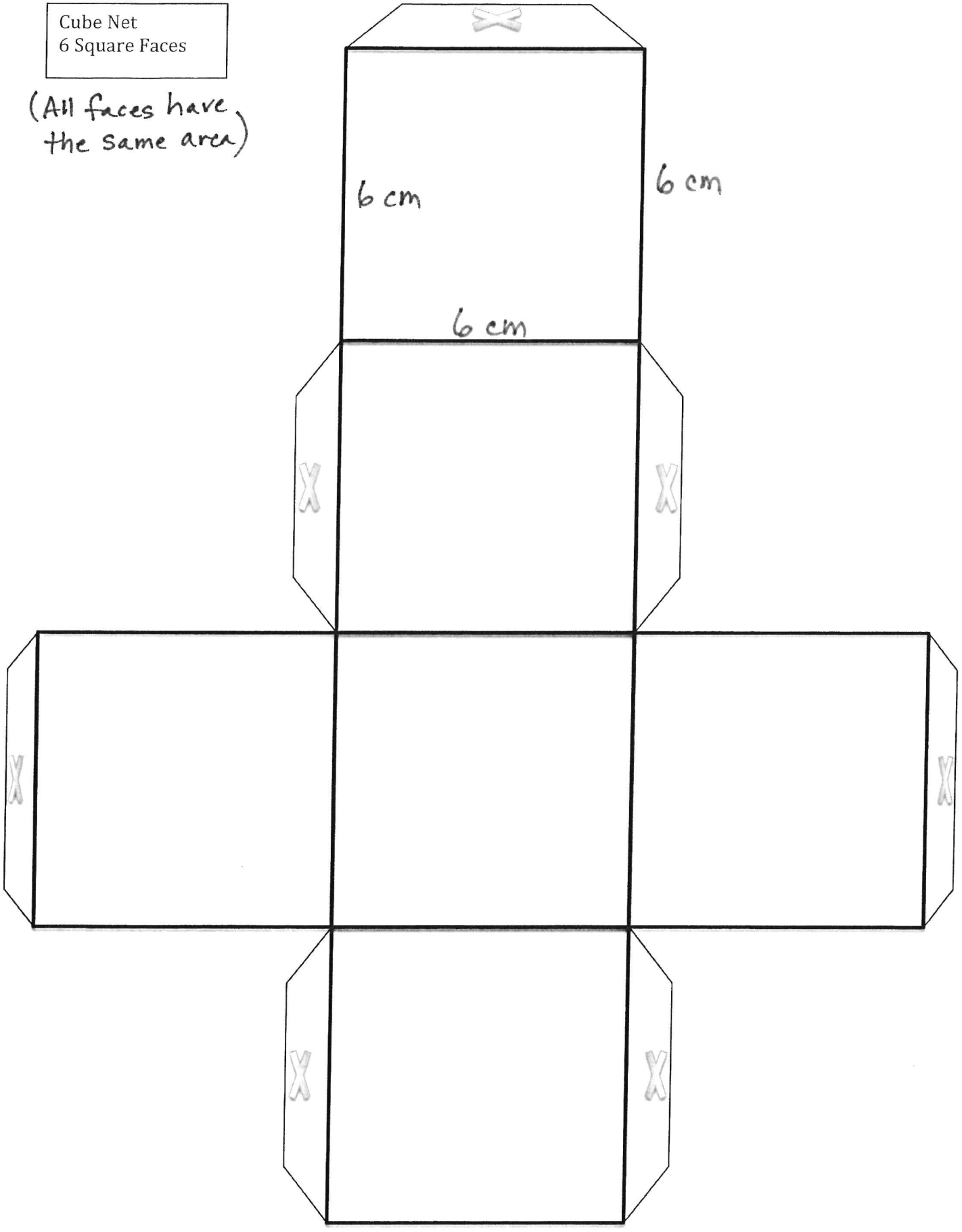
Build a Structure

1) Find the surface area of each net (a net is a pattern you can fold to make a three-dimensional shape (3-D). For example, one of the nets folds into a cube.
2) Cut out the nets making sure not to cut off the tabs, fold each net into its 3-D shape, and tape the tabs so it stays 3-D.
3) Build and decorate a structure using your 3-D shapes.
4) If you can take a picture of it and email it to either Miss VanBoven or Mrs. St. Peter, we would love to see your creation!.

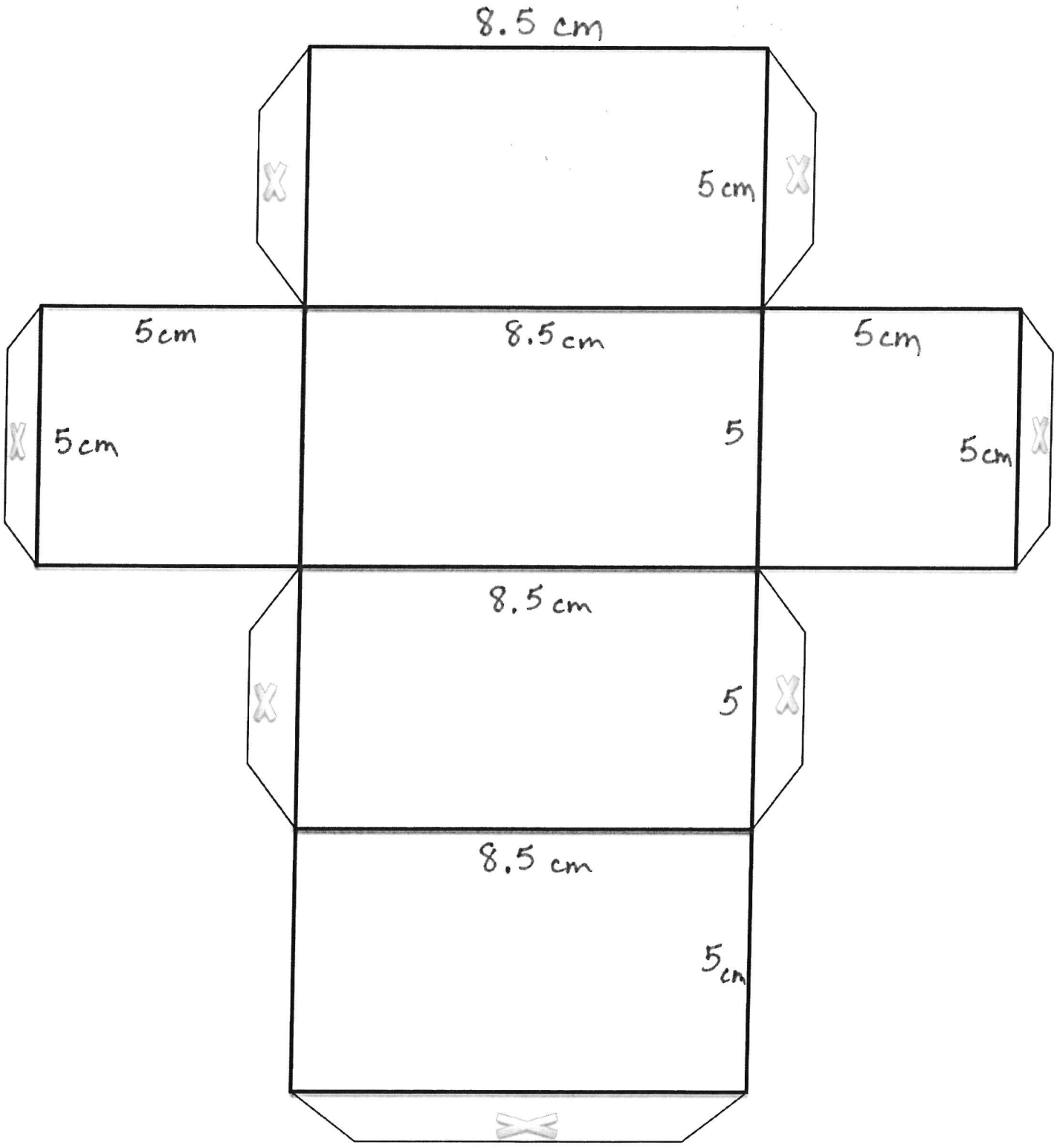


Cube Net
6 Square Faces

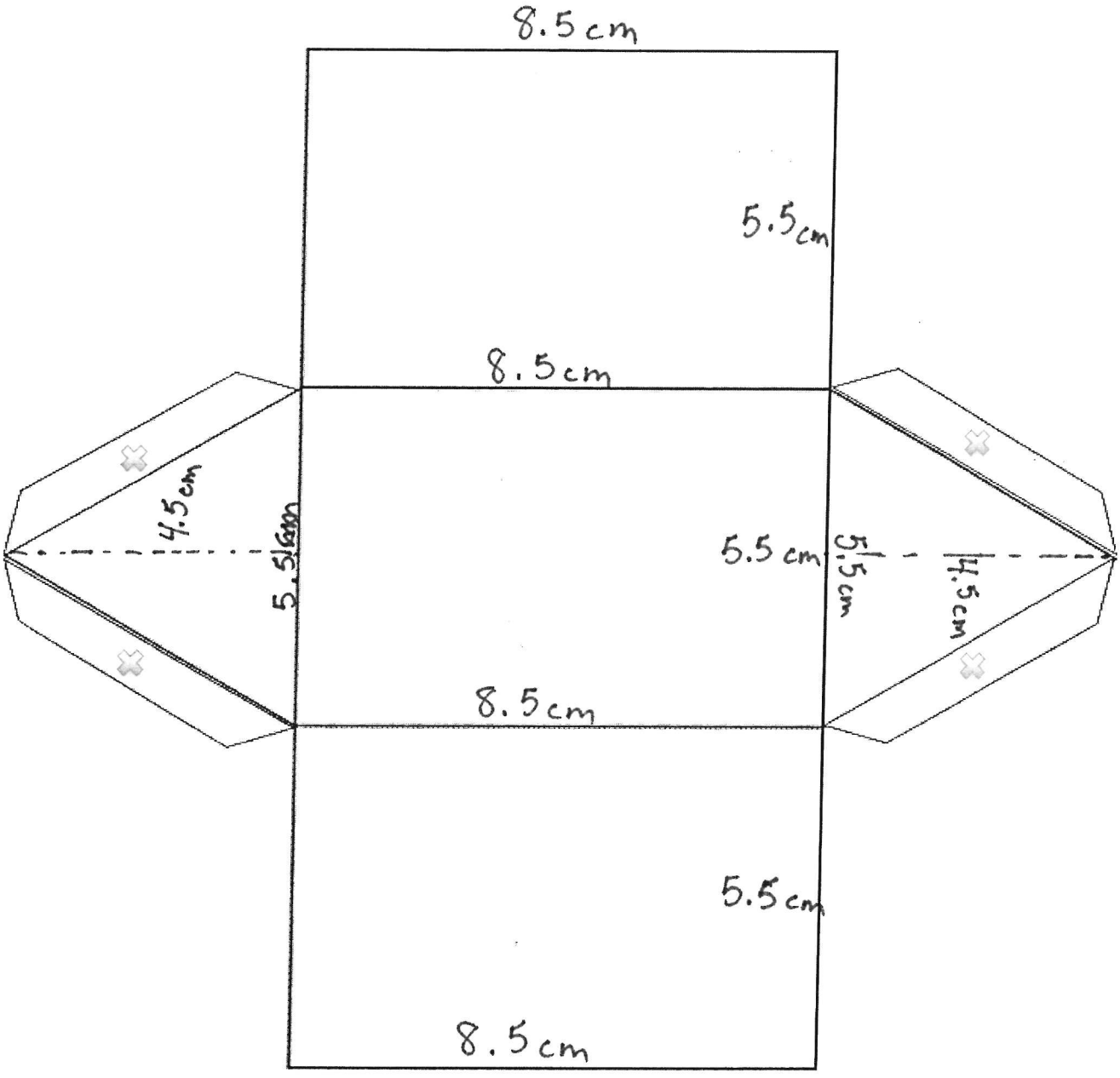
(All faces have the same area)



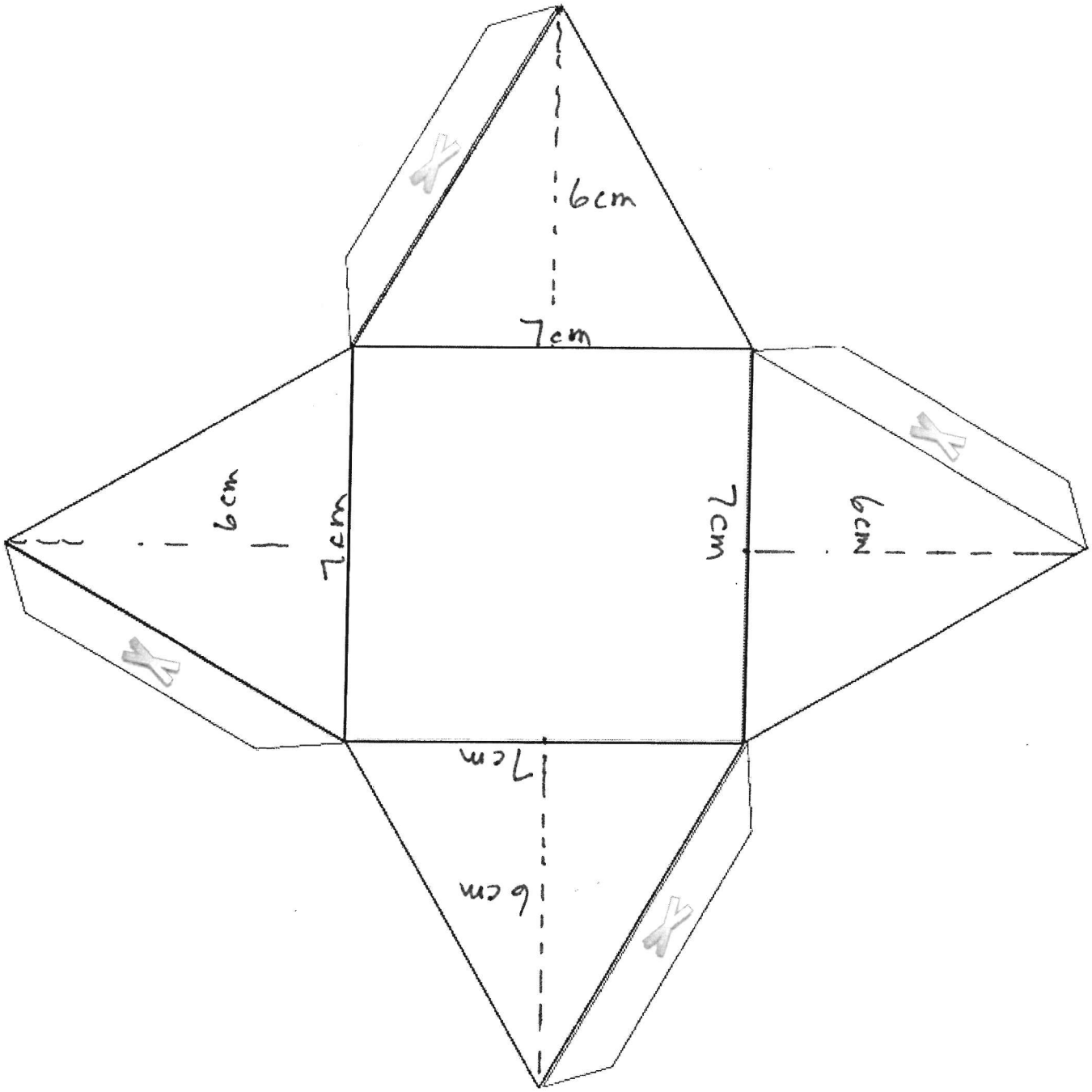
Rectangular Prism Net
4 Rectangular Faces
2 Square Faces



Triangular Prism
3 Rectangular Faces
2 Triangular Faces

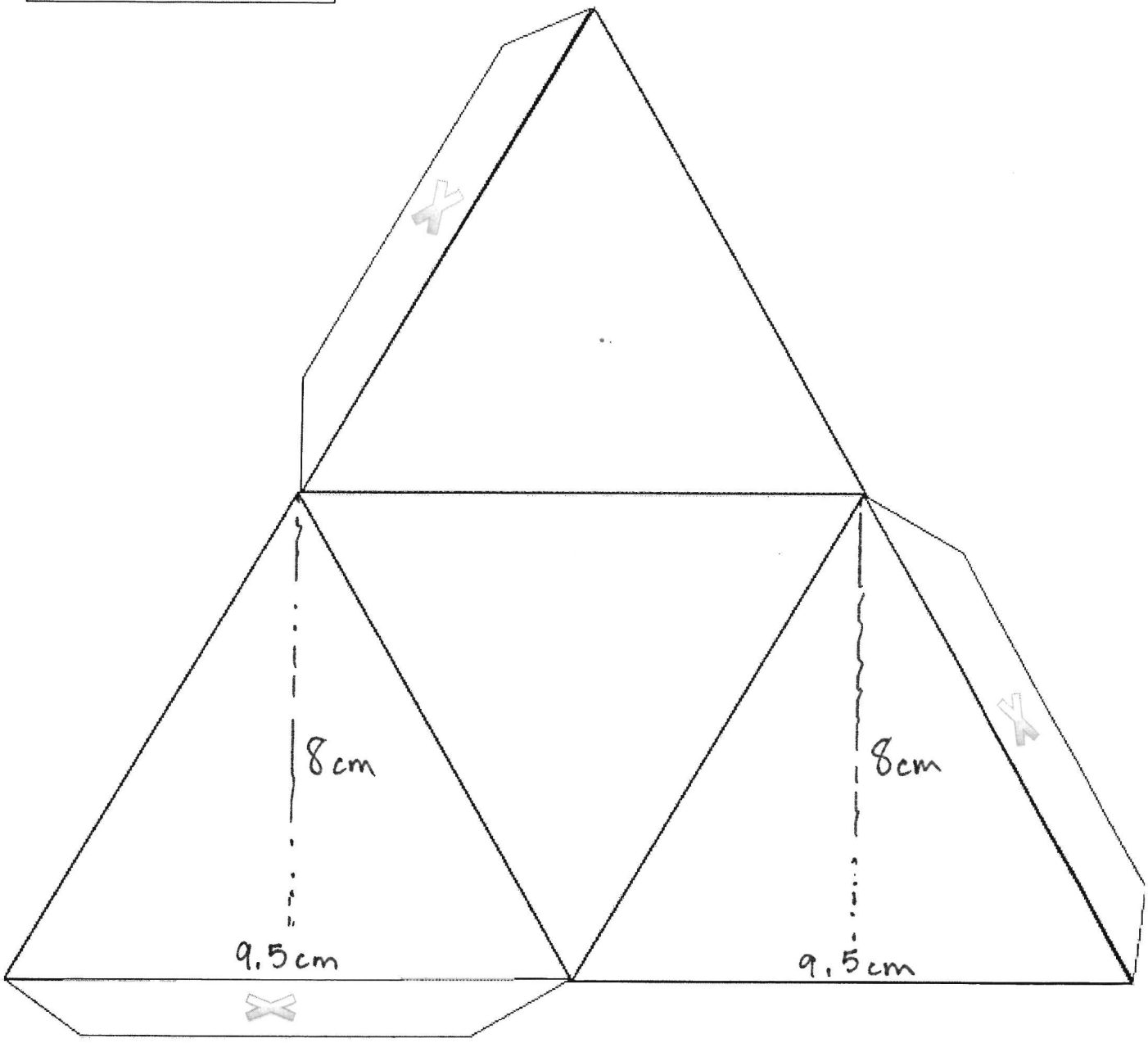


Square Pyramid Net
1 square face
4 triangular faces



Triangular Pyramid
(Also called Tetrahedron)

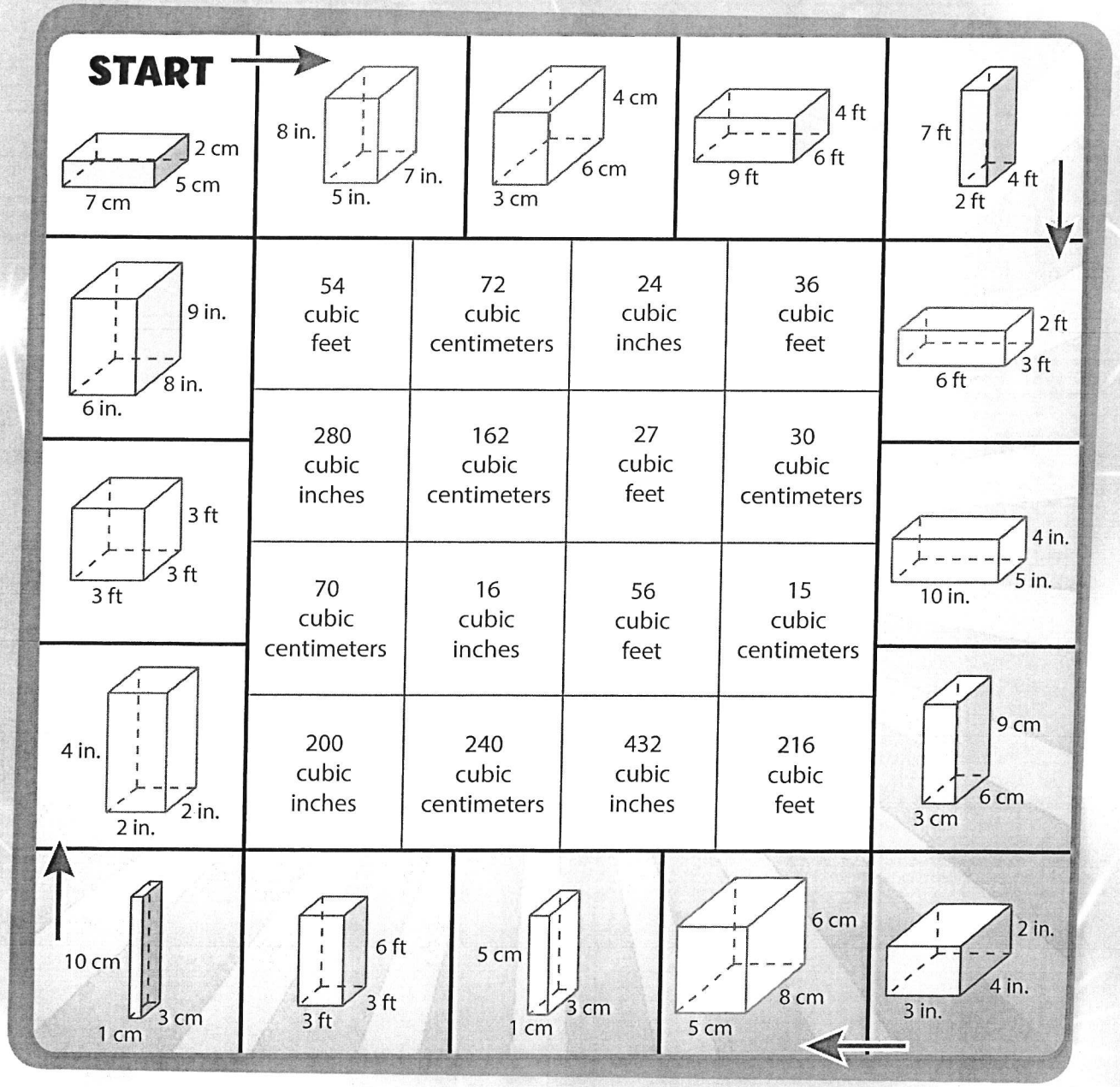
4 triangular faces



Volume Solve and Connect

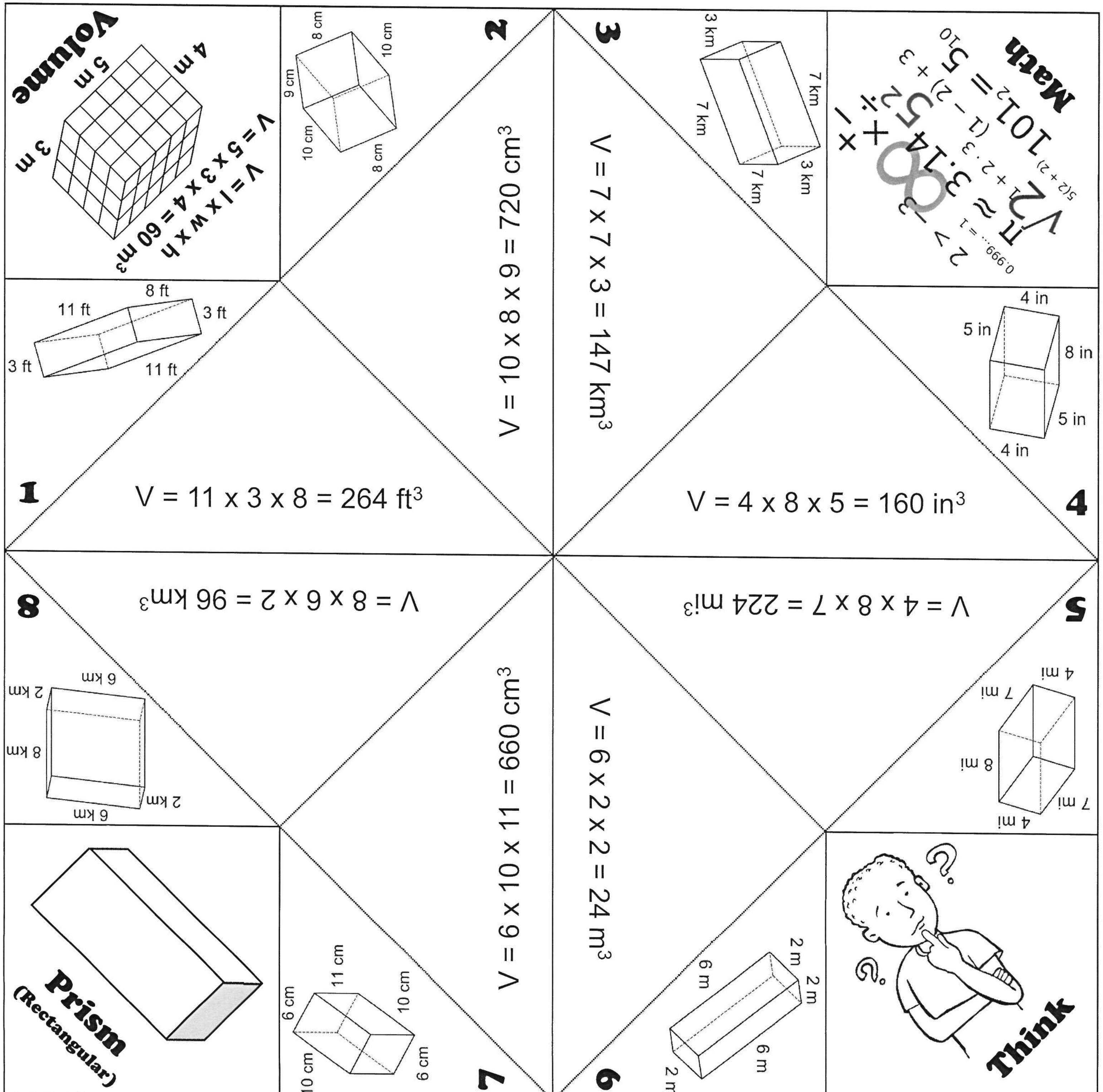
Directions:

1. Players take turns rolling a die.
2. On your turn, move your piece the number of spaces shown on the die.
3. Find the volume of the rectangular prism.
4. Cover the volume with a counter. Your turn is over.
5. The first player to get three in a row, horizontally, vertically, or diagonally, wins!

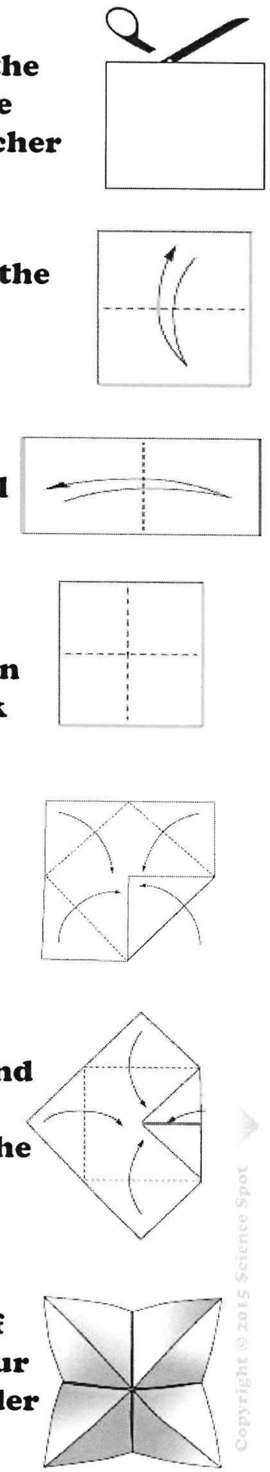


Playing Directions:
(Two Person Play)

1. **One partner picks a word: Volume, Prism, Think, or Math.**
2. **The partner holding the cootie catcher spells out the word, moving the flaps side to side and in and out with the letters.**
3. **The other partner then chooses one of the inside numbers.**
4. **The partner holding the cootie catcher moves the flaps to that number.**
5. **The other partner chooses another number.**
6. **The partner holding the cootie catcher reads the problem for the other person to answer.**



Instructions:



Cut along the edges of the Cootie Catcher

Fold along the horizontal line

Fold along the vertical line

Open it all up and flip it text down on the desk

Fold each corner to the center

Flip over and fold each corner to the center

Fold in half and put your fingers under the flaps

Instructions:

Cut along the edges of the Cootie Catcher

Fold along the horizontal line

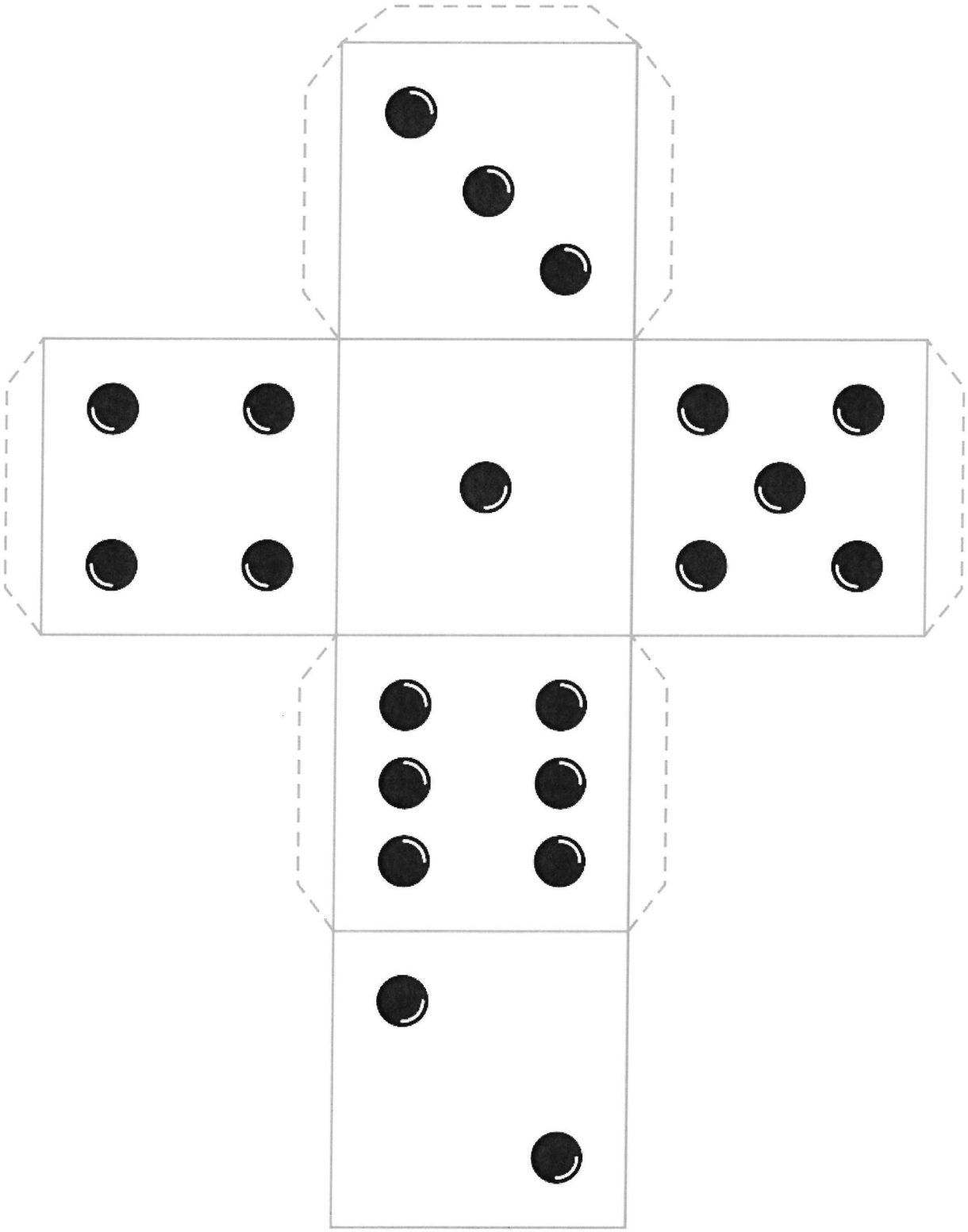
Fold along the vertical line

Open it all up and flip it text down on the desk

Fold each corner to the center

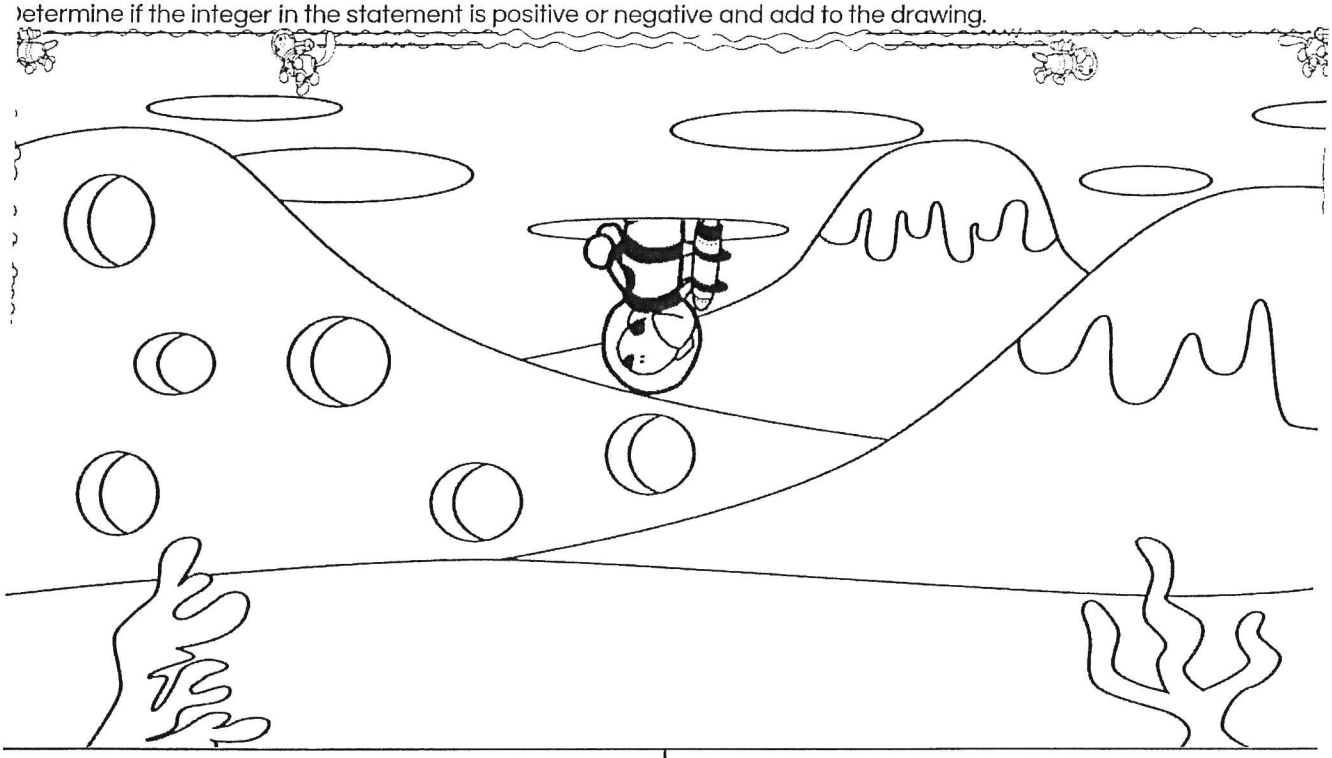
Flip over and fold each corner to the center

Fold in half and put your fingers under the flaps



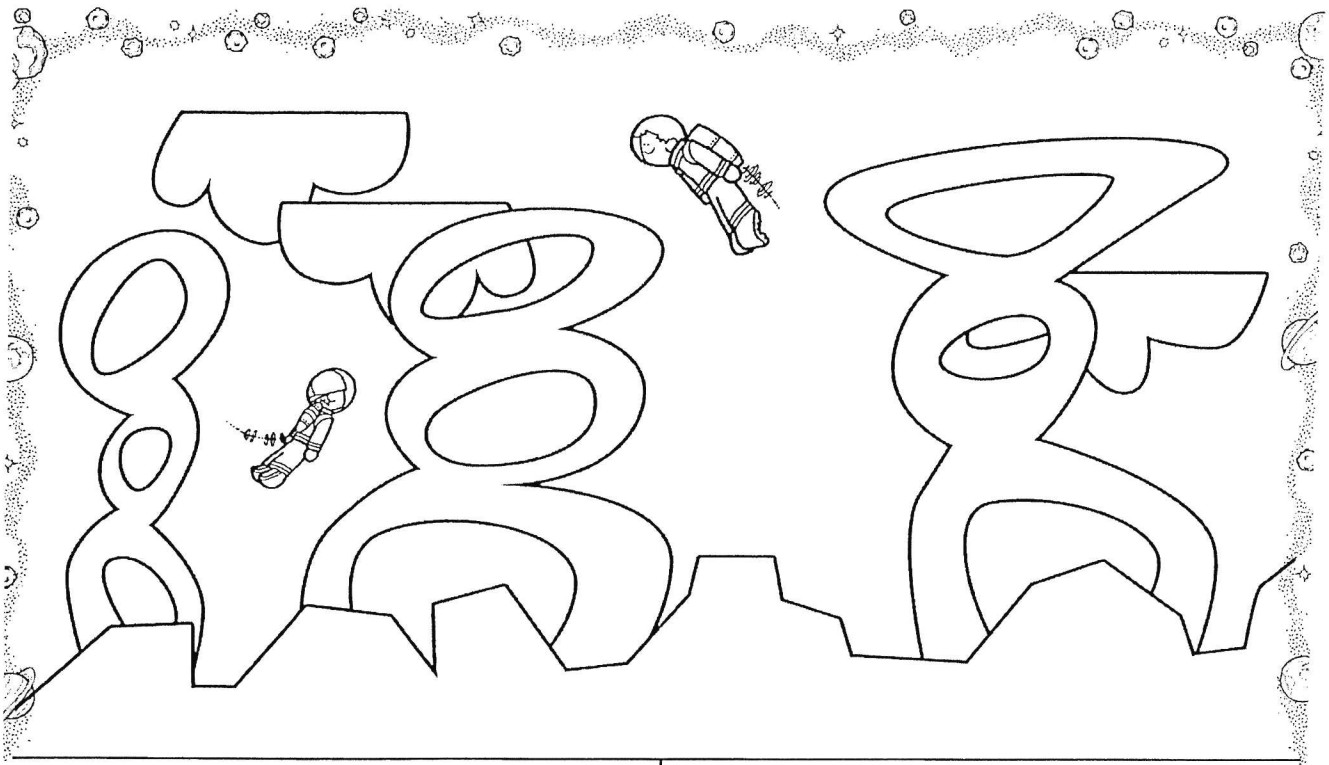
)irections: Name: _____

)etermine if the integer in the statement is positive or negative and add to the drawing.



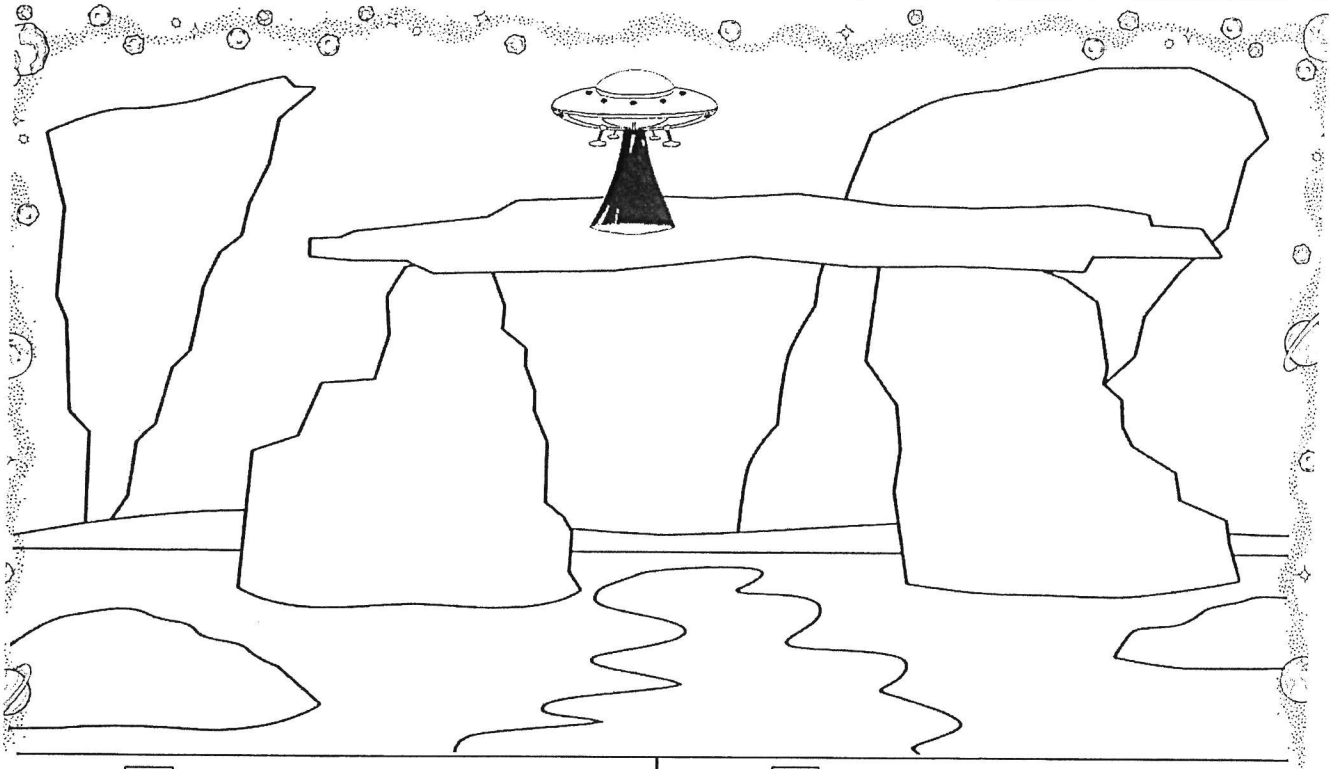
1) 29,028 feet above sea level ❑ If the integer is positive, draw a human astronaut peeking out of a hole in the sky. ❑ If the integer is negative, draw another dog astronaut peeking out of a hole in the sky.	5) Sahara Desert temperature of 136°F ❑ If the integer is positive, draw two more holes in the hill. ❑ If the integer is negative, draw three more holes in the hill.
2) 1,312 feet below sea level ❑ If the integer is positive, draw an alien lake. ❑ If the integer is negative, draw flowers on the alien plants.	6) Sara's paycheck is $200.00 ❑ If the integer is positive, draw an alien snowboarding down the goo on the mountains. ❑ If the integer is negative, draw an alien skiing down the goo on the mountains.
3) Josh owes his mom $35.00 ❑ If the integer is positive, draw another hole in the sky. ❑ If the integer is negative, draw an alien tree.	7) Duke digs a hole that is 2 feet deep ❑ If the integer is positive, draw another alien plant. ❑ If the integer is negative, draw an alien tree.
4) The Empire State building is 103 stories ❑ If the integer is positive, draw a volcanic eruption on top of one mountain. ❑ If the integer is negative, draw more goo oozing down the mountains.	8) Death Valley is 86 meters below sea level ❑ If the integer is positive, draw an astronaut cat peeking out of a hole in the sky. ❑ If the integer is negative, draw an alien cat peeking out of a hole in the sky.

Directions: Simplify and add to the drawing. Name: _____



1) $\lvert -1\frac{1}{2} \rvert$ ❑ If this simplifies to $1\frac{1}{2}$, draw another astronaut. ❑ If this simplifies to $-1\frac{1}{2}$, draw a spaceship in the background.	5) $\lvert -2.6 \rvert$ ❑ If this simplifies to 2.6, draw an alien slithering on the bottom of the page. ❑ If this simplifies to -2.6, draw an alien floating under one of the astronauts.
2) $\lvert 3.5 \rvert$ ❑ If this simplifies to 3.5, draw another tower. ❑ If this simplifies to -3.5, draw an alien peeking from behind a tower.	6) $-\lvert \frac{1}{4} \rvert$ ❑ If this simplifies to $\frac{1}{4}$, draw an alien on a scooter. ❑ If this simplifies to $-\frac{1}{4}$, draw an alien house on the bottom of the page.
3) $-\lvert -2 \rvert$ ❑ If this simplifies to 2, draw two moons. ❑ If this simplifies to -2, draw three moons.	7) $\lvert -1.8 \rvert$ ❑ If this simplifies to 1.8, draw an alien tree. ❑ If this simplifies to -1.8, draw a planet in the sky.
4) $\lvert 0.4 \rvert$ ❑ If this simplifies to 0.4, draw a three-headed bird. ❑ If this simplifies to -0.4, draw goo on top of one of the hills.	8) $-\lvert \frac{5}{6} \rvert$ ❑ If this simplifies to $\frac{5}{6}$, draw an alien in a jetpack. ❑ If this simplifies to $-\frac{5}{6}$, draw alien rain in the sky.

Directions: Compare the integers using <, >, or =, and add to the drawing. Name: _____



1) -4 ☐ -2

- ❑ If -4 is less than -2, draw clouds in the sky.
- ❑ If -4 is greater than -2, draw fog around the ground.

2) 0 ☐ -1

- ❑ If 0 is less than -1, draw an alien coming out of the spaceship.
- ❑ If 0 is greater than -1, draw a mountain climber on the rock on the left side.

3) 7 ☐ -7

- ❑ If 7 is equal to -7, draw a lizard on the small rock on the left side of the page.
- ❑ If 7 is greater than -7, draw a cactus on the right side of the page.

4) 11 ☐ -15

- ❑ If 11 is less than -15, draw a boat on the water.
- ❑ If 11 is greater than -15, draw an alien standing by the water.

5) -5 ☐ -4

- ❑ If -5 is less than -4, draw lightening in the sky.
- ❑ If -5 is greater than -4, draw another rock on the right side of the page.

6) 2 ☐ -2

- ❑ If 2 is equal to -2, draw bubbles in the water.
- ❑ If 2 is greater than -2, draw a snake with big eyes slithering away from the spaceship.

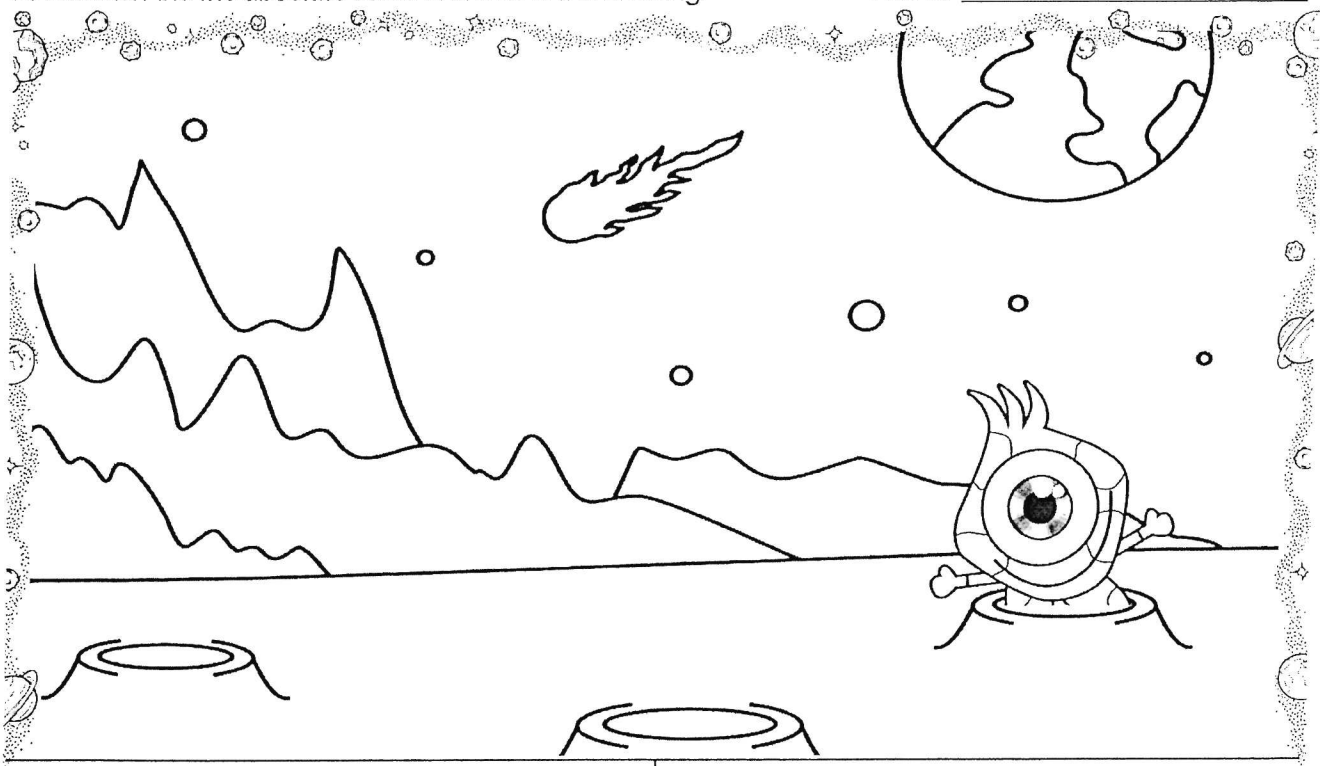
7) -4 ☐ -3

- ❑ If -4 is less than -3, draw a tumbleweed by one of the rocks.
- ❑ If -4 is greater than -3, draw an aardvark by one of the rocks.

8) -1 ☐ 1

- ❑ If -1 is less than 1, draw another rock formation in the background.
- ❑ If -1 is equal to 1, draw an alien climbing down a rock.

Directions: Find the absolute value and add to the drawing. Name: _____



1) |-9|

- ❑ If the absolute value is 9, draw another alien coming out of the middle crater.
- ❑ If the absolute value is -9, draw another alien coming out of the crater on the left.

5) |-6|

- ❑ If the absolute value is -6, draw another crater.
- ❑ If the absolute value is 6, draw an alien city in front of the mountains.

2) |3|

- ❑ If the absolute value is -3, draw another comet in the sky.
- ❑ If the absolute value is 3, draw an alien spaceship in the sky.

6) |1|

- ❑ If the absolute value is -1, draw fangs on the original alien.
- ❑ If the absolute value is 1, draw two more arms on the original alien.

3) |5|

- ❑ If the absolute value is -5, draw an astronaut in the sky.
- ❑ If the absolute value is 5, draw another mountain in the background.

7) |-8|

- ❑ If the absolute value is 8, draw antenna on the original alien.
- ❑ If the absolute value is -8, draw another planet in the sky.

4) |4|

- ❑ If the absolute value is 4, draw trees on the mountains.
- ❑ If the absolute value is -4, draw a volcano on one of the mountains.

8) |-7|

- ❑ If the absolute value is -7, draw alien flowers around the craters.
- ❑ If the absolute value is 7, draw alien flowers in the hands of the original alien.

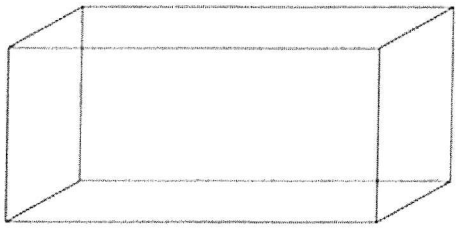
ANSWER SHEET

Answers

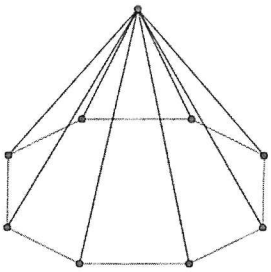
Answers

7.4 Check Your Understanding

1) Faces: 10 Edges: 24 Vertices: 16
2) Faces: 7 Edges: 12 Vertices: 7
3)



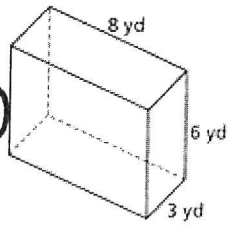
4)

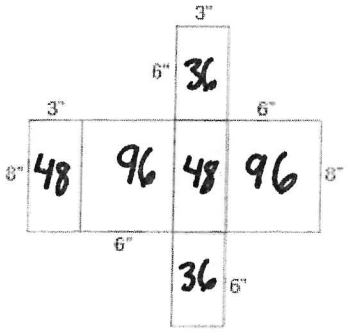


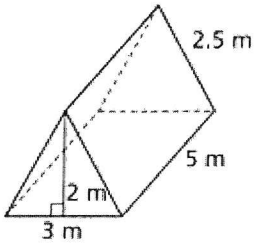
7.4 Puzzle
"SWIMMING TRUNKS"

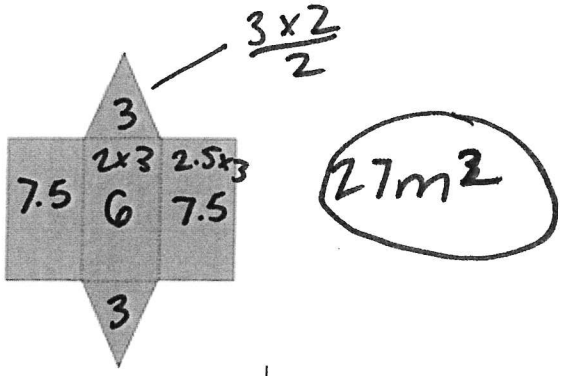
7.5 Check Your Understanding

$2(6\times3) = 36$
$2(8\times3) = 48$
$2(8\times6) = 96$
$180\ yd^2$









Answers continued...

7.5 Puzzle

"A CLOCKMAKER"

7.7 Check Your Understanding

1) 108 meters cubed 2) 54 cm cubed

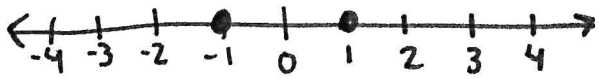
7.7 Puzzle

"YOU GO AHEAD I'LL JUST HANG AROUND"

8.1 Check Your Understanding

1) Positive 2) Negative

3)



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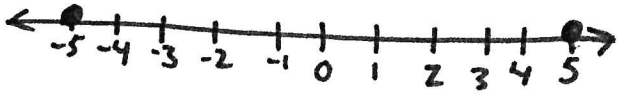


8.1 Puzzle

"SHOCK ABSORBERS"

8.2 Check Your Understanding

Copy and complete the statement using < or >.

1. $-7 \_\_\leq\_\_ 7$ **2.** $3 \_\_\geq\_\_ -1$ **3.** $-2 \_\_\geq\_\_ -4$

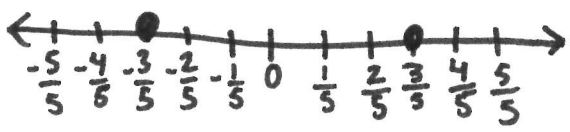
4. -9, -6, 3, 6, 9 **5.** -7, -4, -2, 3, 5

8.2 Puzzle

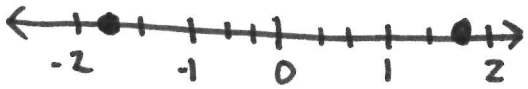
"DUMBELLS THAT WERE ALWAYS LATE BECAUSE THEY GOT HELD UP AT THE GYM"

8.3 Check Your Understanding

1)



2)



3. $-\frac{3}{5} \_\_ -\frac{7}{10}$ **4.** $-\frac{4}{9} \_\_ -\frac{1}{3}$ **5.** $-1\frac{1}{2} \_\_ -1\frac{3}{4}$

8.3 Puzzle

"LUNCH IS ON ME"

8.4 Check Your Understanding

1) 8 2) 7.5 3) $\frac{2}{3}$

4. $|-6.2| \_\_ |7.9|$ **5.** $12 \_\_ |-12|$

8.4 Puzzle

"MATADOR WHO BECAME A BASEBALL PLAYER AND HE COULD ALWAYS BE FOUND IN THE BULL PEN"

FEEDBACK SECTION

Check Ups

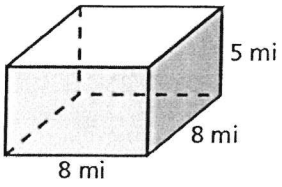
*Turn into your teacher

Name _____ Date _____

End of Chapter 7 Check Up ** Turn in to your teacher

1. Find the number of faces, edges, and vertices of a rectangular pyramid.

Find the surface area of each solid by finding the total area of all the faces.



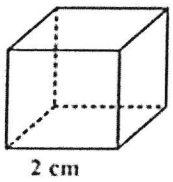
Length x Width = _____

Length x Height = _____

Width x Height = _____

Total Surface Area (Remember there are 6 faces)

_____

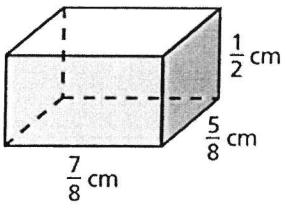


This is a cube so all 6 faces have the same area.

The area of each face = _____

The total surface area of the cube = _____

4. Find the volume of the prism. Remember when you multiply fractions you should multiply straight across. ☺



5. Look at the rectangular prism in question #4. How many faces, edges, and vertices does it have?

_____ **faces** _____ **edges** _____ **vertices**

Name _____ Date_____

Chapter 8 Mid Chapter Check Up

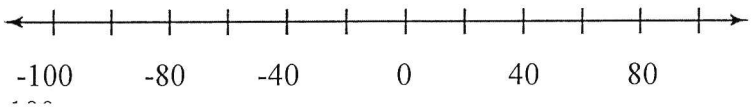
******NEEDS TO BE TURNED IN**

1. Write a positive or negative integer that represents the situation.

   You earn $25.

   _____

2. Graph -80 and its opposite.



3. Circle the colder temperature. $-187°C$ or $-168°C$?

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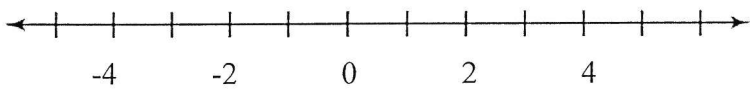
4. Graph -3.6 and its opposite.



Complete the statement using < or >.

5. $-9\frac{4}{5}$ ____ $-9\frac{1}{5}$

6. -2.5 ____ -3.7

7. Find $|22|$. = _____

8. Simplify the expression $-|-7|$. _____