

# 5 FREE ACTIVITIES

## for Geometry


Name \_\_\_\_\_ Date \_\_\_\_\_

### RIGHT TRIANGLE TRIGONOMETRY

*What's the Word?*

Directions: Solve each problem. Find your answers on the back and locate the corresponding letter. Write all the letters down and unscramble them to identify a Geometry term. Then, define it!

1. Solve for  $x$  to the nearest tenth.



Name \_\_\_\_\_ Date \_\_\_\_\_

### VOLUME OF PRISMS

*Riddle Reveal*

Directions: Solve each problem. Find its answer in the answer bank and write the letter of that problem above the line provided. When all questions are completed, the answer to the riddle will be revealed!

What did the Librarian say to the large prism?

D) Find the volume of the solid shown below, in cubic inches.

W) A concrete block in the shape of a rectangular prism has a length of 12 inches, width of 8 inches, and a height of 10 inches. Find its volume in cubic inches.

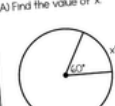
Name \_\_\_\_\_ Date \_\_\_\_\_

### CENTRAL + INSCRIBED ANGLES

*Circuit Training*

Directions: A circuit is a route that starts and ends at the same place. Remaining boxes for the answer you got for A. Now complete that question and you are back where you started. You can repeat this as many times as you want.

A) Find the value of  $x$ .



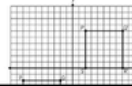
Name \_\_\_\_\_ Date \_\_\_\_\_

### IDENTIFYING RIGID MOTIONS

*Color by Number*

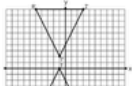
Directions: Answer each question below. Find your answer in the answer bank and the corresponding color listed next to it. On the next page, write the correct color next to each question number to create your color code. Then, color your Geometric mandala accordingly. (Assume all rotations listed are about the origin.)

1. Identify the rigid motion that maps PQRS onto P'Q'R'S'.



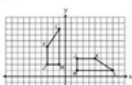
$T_{x,2}$	pink
$R_{180}$	gray
$T_{1,3}$	green

2. Identify the rigid motion that maps  $\triangle RTI$  onto  $\triangle R'T'I'$ .



$T_{x,1}$	red
$F_{y,3}$	purple
$T_{x,2}$	yellow

3. Identify the rigid motion that maps JKLM onto J'K'L'M'.



$R_{270}$	yellow
$R_{90}$	blue
$R_{180}$	brown

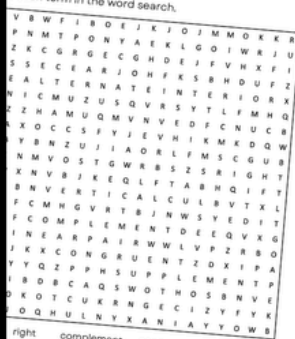
page 1

### The Geometry Games

L. 1a Angle Relationships

Word Search

Find each term in the word search.

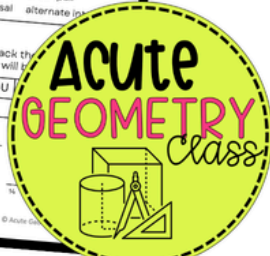


right complement congruent linear pair  
obuse supplement transversal alternate

Each number represents a letter. Crack the code by finding all letters from the alphabet that will fit in the boxes.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	
L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z											

EXCLUSIVE FREEBIES!



click here to get them!

- Angle Relationships Puzzle Sheet
- Identifying Rigid Motions Color by Number
- Volume of Prisms Riddle Reveal
- Central & Inscribed Angles Circuit/Scavenger Hunt
- Right Triangle Trigonometry Mystery Word

# THANK YOU FOR YOUR PURCHASE!

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## THANK YOU TO THESE ARTISTS



Name: \_\_\_\_\_

Date: \_\_\_\_\_

# CROSS SECTIONS OF SOLIDS

## What's the Word?

Directions: Complete each question. Find your answers on the back and locate the corresponding letter. Write all the letters down and unscramble them to identify a Geometry term. Then, define it!

1. A plane intersects a cone. Which of the following could be the shape of the cross section formed when the plane intersects the cone? Select all that apply. (Find all answer choices in the answer bank.)

1) square

4) rectangle

2) circle

5) hexagon

3) triangle

6) oval

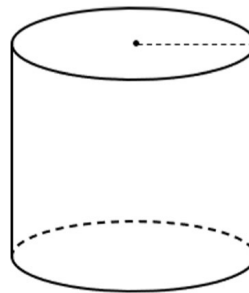
2. A plane intersects a cylinder parallel to its base. The cross section can be described as a

7) rectangle

8) circle

9) triangle

10) square



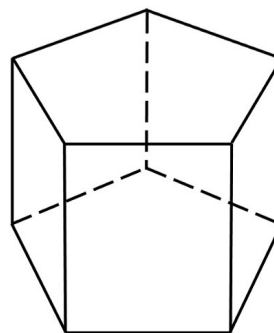
3. A plane intersects a pentagonal prism perpendicular to its base. The cross section can be described as a

11) pentagon

12) rectangle

13) triangle

14) octagon



Name: \_\_\_\_\_

Date: \_\_\_\_\_

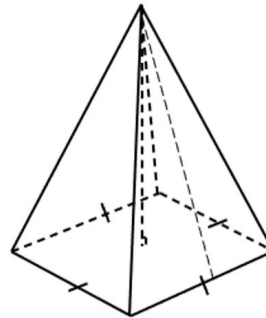
4. Which solid would have triangular cross sections when cut parallel to the base AND perpendicular to the base?

- 15) cone
- 16) cylinder
- 17) triangular pyramid
- 18) triangular prism

5. A cross section is taken from a trapezoidal prism. Which of the following could *not* be the shape of the cross section?

- 19) triangle
- 20) rectangle
- 21) trapezoid
- 22) circle

6. The pyramid shown below is cut perpendicular to its base. What shape is the cross section formed by this cut?



- 23) triangle
- 24) square
- 25) rectangle
- 26) trapezoid

4	14	22	12	6	26	11	19	3	13	5	17	25	2	7	18	21	8	9	1	20	15	24	16	23	10
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

Write the letters from your answers below.

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Now unscramble them to get a Geometry term. What's the word?

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Define your word here!

Name: Answer Key

Date: \_\_\_\_\_

# CROSS SECTIONS OF SOLIDS

## What's the Word?

Directions: Complete each question. Find your answers on the back and locate the corresponding letter. Write all the letters down and unscramble them to identify a Geometry term. Then, define it!

1. A plane intersects a cone. Which of the following could be the shape of the cross section formed when the plane intersects the cone? Select all that apply. (Find all answer choices in the answer bank.)

1) square

4) rectangle

2) circle

5) hexagon

3) triangle

6) oval

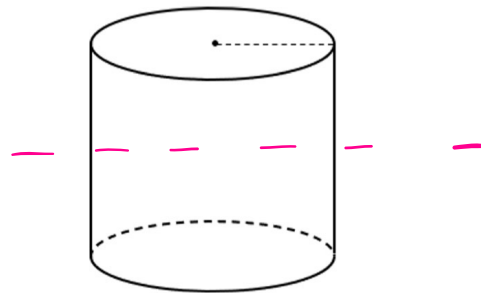
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8) circle

9) triangle

10) square



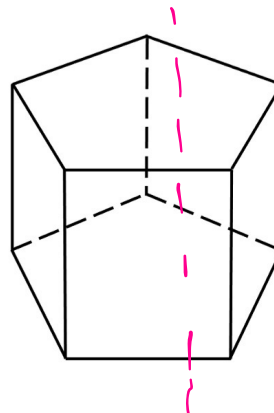
3. A plane intersects a pentagonal prism perpendicular to its base. The cross section can be described as a

11) pentagon

12) rectangle

13) triangle

14) octagon



Name: ANSWER KEY

Date: \_\_\_\_\_

4. Which solid would have triangular cross sections when cut parallel to the base AND perpendicular to the base?

15) cone

16) cylinder

17) triangular pyramid

18) triangular prism

5. A cross section is taken from a trapezoidal prism. Which of the following could *not* be the shape of the cross section?

19) triangle

20) rectangle

21) trapezoid

22) circle

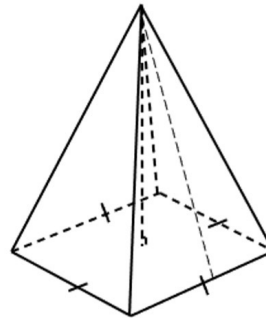
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26) trapezoid



4	14	22	12	6	26	11	19	3	13	5	17	25	2	7	18	21	8	9	1	20	15	24	16	23	10
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z

Write the letters from your answers below.

N I E R D L C Y

Now unscramble them to get a Geometry term. What's the word?

C Y L I N D E R

Define your word here!

A cylinder is a 3D shape with 2  $\cong$  and || circular bases.