2-1 Opener - Angles and Congruence

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Use the figure to identify angles and parts of angles that satisfy each given condition.

A blue lines with arrows

Description automatically generated with medium confidence

What is another name for ∠2?

What is another name for ∠4?

1. Use the figure to answer the question.

A blue arrows pointing to a black background

Description automatically generated

 In the figure, and are opposite rays. bisects .   
If and, find .

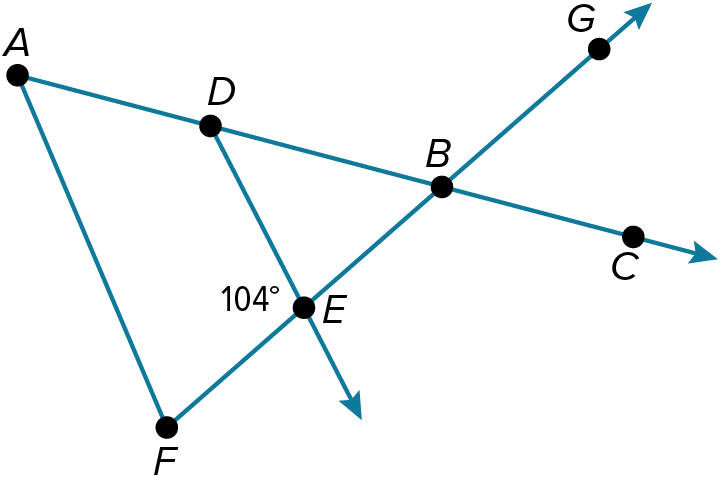
1. Find the value of the variable.

A blue x on a black background

Description automatically generated

2-1 Exit Slip - Angles and Congruence

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Refer to the figure.

Name two adjacent angles.

Name two vertical angles.

Find .

1. Find the value of the variable.

A blue lines on a black background

Description automatically generated A blue arrow pointing to a black background

Description automatically generated

2-2 Opener – Angle Relationships

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

Use the figure to answer the questions.

1. The measure of the supplement of an angle is four times the measure of the angle.

Find the measures of the angle and its supplement?

1. Rays and are perpendicular. Point V lies in the interior of .

If and find , , and .

1. Determine whether each statement can be assumed from the given figure. Explain.

A blue lines with a square in the center

Description automatically generated

∠4 and ∠7 are supplementary.

∠3 and ∠10 are complementary.

∠2 and ∠10 are vertical angles.

2-2 Exit Slip – Angle Relationships

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

Use the figure to answer the questions.

1. ∠B and ∠C are supplementary. The measure of ∠B is 83° more than the measure of ∠C. Find the measure of each angle.
2. Determine whether each statement can be assumed from the given figure.

A blue lines with a square in the center

Description automatically generated

∠7 and ∠9 are vertical angles.

∠4 and ∠5 form a linear pair.

∠1 and ∠2 form a linear pair.

2-3 Opener – 2 Dimensional Figures

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

A circle with a measurement

Description automatically generated with medium confidenceFind the area, circumference, and perimeter of each figure or description.

A graph of a triangle

Description automatically generated

1)

A triangular piece of bread with a black background

Description automatically generated

2)

3)

A graph of a function

Description automatically generated

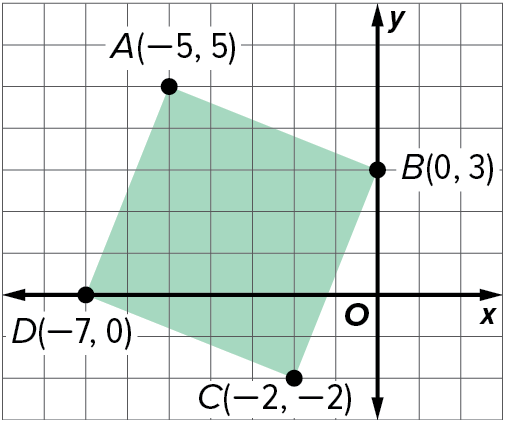
4)

2-3 Exit Slip – 2 Dimensional Figures

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

A tablet with a green landscape

Description automatically generatedFind the area, circumference, and perimeter of each figure or description.



1)

**A pyramid shaped tent with a tent attached to it

Description automatically generated**2)

3)

A green circle with black dots and a black dotted line

Description automatically generated

4)

2-4 Opener – Transformations in the Plane

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1) Identify the type of rigid motion shown as a reflection, translation, or rotation.

A train on the tracks

Description automatically generatedA graph of a triangle and a triangle

Description automatically generated with medium confidenceA red bicycle with a black tire

Description automatically generated

**A graph of x and y axis

Description automatically generated**

1. Triangle JKL has coordinates J(2, –5), K(–1, –3), and L(–4, 5). Determine the coordinates of the vertices of the image after each transformation.

translation along the vector

rotation about the origin

2-4 Opener – Transformations in the Plane

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1) Identify the type of rigid motion shown as a reflection, translation, or rotation.

A moon reflecting in water

Description automatically generatedA black grid with green and blue lines

Description automatically generatedA graph of lines and dots

Description automatically generated

**A graph of x and y axis

Description automatically generated**

1. Triangle JKL has coordinates J(–1, 5), K(1, 2), and L(–3, –1). Determine the coordinates of the vertices of the image after each transformation.

translation along the vector 〈5, –4〉

rotation 90° counterclockwise about the origin

2-5 Opener – 3 Dimensional Figures

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. A blue pyramid with a dotted line

   Description automatically generatedDetermine whether each solid is a polyhedron. Then identify the solid. If it is a polyhedron, name the bases, faces, edges, and vertices.



1. Find the surface area and volume of the following figures.

A blue triangle with a red line

Description automatically generatedA blue rectangular object with black lines

Description automatically generated

2-5 Exit Slip – 3 Dimensional Figures

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Determine whether each solid is a polyhedron. Then identify the solid. If it is a polyhedron, name the bases, faces, edges, and vertices

A blue circle with a black line and a black circle with a black line and a black circle with a black line and a black circle with a black circle with a black line and a black circle

Description automatically generated

A blue rectangular object with black lines

Description automatically generated

1. A blue cylinder with a black line

   Description automatically generatedFind the surface area and volume of the following figures.

A blue triangle with black lines

Description automatically generated

2-6 Opener – Represent 3D in 2D

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Make an orthographic drawing of the figure.

A blue cubes on a black background

Description automatically generated

1. Make a model of the solid that is represented by the net. Then identify the solid and find its surface area.

A blue square with black text

Description automatically generated

2-6 Exit Slip – Represent 3D in 2D

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

1. Make an orthographic drawing of the figure.

A blue cubes on a black background

Description automatically generated

1. Make a model of the solid that is represented by the net. Then identify the solid and find its surface area.

A blue figure with a black background

Description automatically generated

2-7 Opener – Precision and Accuracy

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

**GOLF BALLS** A national sports equipment retailer is selling golf balls in bags of 50 golf balls per bag. A consumer advocate group checks 10 random bags, and the actual count for these is 50, 50, 50, 50, 50, 50, 50, 50, 50, and 50 balls per bag. How accurate and precise is the retailer’s advertisement? Explain your reasoning.

**ROPE** The local hardware store sells nylon rope in packages labeled as containing 100 feet of rope. The rope in one package measured 101.5 feet. What is the approximate error?

2-7 Exit Slip – Precision and Accuracy

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

**COFFEE**  A coffee maker manufacturer claims that the customer will get 48 six-ounce cups of coffee from a one-pound bag of coffee. A survey of 7 customers reveals that actual cup counts by the customers of 49, 50, 53, 47, 45, 42, and 53. Is the manufacturer’s claim accurate? Is the manufacturer’s claim precise? Explain your reasoning.

**STRING** The package for a ball of string states that the length of the string is 400 yards. The actual measured length is 403 yards. What is the approximate error?

2-8 Opener – Representing Measurements

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

Determine the number of significant digits in each measurement.

A tall building with many windows

Description automatically generated

978.56 1000

**LAB MEASUREMENTS** Dr. Metser asked his physical science class to weigh a sample of lead which was to be used in an experiment. He asked the students to record their measurements to 3 significant digits. Which student did as he instructed?

|  |  |
| --- | --- |
| **Student** | **Weight (g)** |
| Althea | 2.25 |
| Berto | 2.258 |
| Rebecca | 2.2 |

2-8 Exit Slip – Representing Measurements

Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date:\_\_\_\_\_\_\_\_ Period:\_\_\_\_\_\_\_\_

Determine the number of significant digits in each measurement.

A red couch and a ruler

Description automatically generated4.68 0.0602

**FREEZER** A food freezer has interior dimensions of 2.58 feet by 5.1 feet by 2.14 feet. Find the storage volume of the freezer. Round your answer to the correct number of significant figures.