11-1 Opener - Area of Quadrilaterals

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

1. Find the area of the given figures.

A blue triangle with pink lines

Description automatically generated

A blue square with pink lines

Description automatically generated

A green rectangular object with a black background

Description automatically generated

**2) GRASS SOD** A landscaping contractor is installing grass sod on the lawn of a new office building.

**a.**  What is the area of the lawn?

**b.**  If the cost of the sod is $1.10 per square foot, what is the price for the new lawn?

1. If the area of a parallelogram is 676 miles and the height is four times the length of the base, what are the lengths of the base and height?

11-1 Exit Slip - Area of Quadrilaterals

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

1. Find the area of the given figures.

A blue triangle with a red line

Description automatically generatedA blue rectangle with pink lines

Description automatically generated

A blue and black coffee cup

Description automatically generated

**2) CONCRETE PATIO**The Campbells are planning on having a concrete patio in the shape of a trapezoid installed at their back door.

**a.**  What is the area of the patio?

**b.**  If the price to install the concrete patio is $7.20 per square foot, what should the Campbell’s budget be for the project?

**3)**If the area of a kite is 44 square inches and the length of the long diagonal is 11 inches, what is the length of the short diagonal?

11-2 Opener – Area of Regular Polygons

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

1. A blue diamond with a black dot and a red line

   Description automatically generatedFind the area of the polygons.

A hexagon with a black dot and a pink line

Description automatically generated

1. In each figure, a regular polygon is inscribed in a circle. Identify the center, a radius, an apothem, and a central angle of each polygon. Then find the measure of a central angle.

A blue and pink line in a circle

Description automatically generated.

1. Find the area of the figure. Round to the nearest tenth, if necessary.

A blue hexagon with black text

Description automatically generatedA blue hexagon with pink lines

Description automatically generated

11-2 Exit Slip – Area of Regular Polygons

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

1. A blue hexagon with a black dot and a pink line

   Description automatically generatedFind the area of the polygons.

A blue hexagon with a black dot and a black line

Description automatically generated

1. In each figure, a regular polygon is inscribed in a circle. Identify the center, a radius, an apothem, and a central angle of each polygon. Then find the measure of a central angle.

A blue and pink circle with a black background

Description automatically generated.

1. Find the area of the figure. Round to the nearest tenth, if necessary.

A diagram of a triangle

Description automatically generatedA blue rectangle with pink lines on a black background

Description automatically generated

11-4 Opener – Surface Area

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

1. Find the lateral area and surface area of each solid.

Round to the nearest tenth, if necessary.

A blue triangle with pink lines

Description automatically generatedA blue cube with black lines

Description automatically generated

A blue triangular object with black lines

Description automatically generated

1. Find the surface area of the solids. Round to the nearest tenth, if necessary.

A blue cylinder with a black line

Description automatically generatedA 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 red line and a black circle with a black circle with

Description automatically generated

11-4 Exit Slip – Surface Area

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

1. Find the lateral area and surface area of each solid.

Round to the nearest tenth, if necessary.

A blue rectangular object with black lines

Description automatically generatedA blue cylinder with black lines

Description automatically generatedA blue triangle with pink lines

Description automatically generated

1. Find the surface area of the solids. Round to the nearest tenth, if necessary.

A blue circle with black lines and a black circle

Description automatically generated

A blue rectangle with black border

Description automatically generated

11-6 Opener – Volume of Prisms and Pyramids

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

1. A blue cube with black lines and pink points

   Description automatically generatedA blue triangle with black lines and a black background

   Description automatically generatedA blue pyramid with black lines

   Description automatically generatedFind the volume of each prism or pyramid. Round your answer to nearest tenth, if necessary.

**BLOCK OF CHEESE** A chef is purchasing cheese for a dish and wants to calculate the volume of cheese in a single block.

A yellow rectangular object with black lines

Description automatically generated**a.** Find the volume of cheese in terms of *x.*

**b.** Find the volume of cheese if *x* = 5 mm..

11-6 Exit Slip – Volume of Prisms and Pyramids

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

1. Find the volume of each prism or pyramid. Round your answer to nearest tenth, if necessary.

A blue triangular object with black lines and a black background

Description automatically generatedA blue cube with black lines

Description automatically generatedA blue octagon with black lines and pink dots

Description automatically generated

A pyramid with a black line

Description automatically generated with medium confidence **PYRAMID CONSTRUCTION** A wilderness survival expert is constructing a pyramid-style structure to house guests for retreats and workshops. The structure will be in the shape of a regular square pyramid with side lengths of 2*y* and a height of 3*y.*

**a.** Find the volume of the structure in terms of *y.*

**b.** Find the volume of the structure if *y* = 5 feet.

11-7 Opener – Volumes of Cylinders, Cones, and Spheres

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

1. Find the volume of a cylinder with a radius of 2x + 3 inches and a height of 4x inches.

**a.** Find the volume of the cylinder in terms of *x* and .

**b.**  Find the volume of the cylinder if *x* = 3 inches. Round your answer to the nearest tenth.

A blue triangle with pink lines

Description automatically generated

1. Examine the cone. Round your answer to the nearest tenth, if necessary.

**a.** Find the volume of the cone in terms of *x* and **.**

**b.** Find the volume of the cone if *x* = 12 millimeters.

1. Examine the sphere. Round your answer to the nearest tenth, if necessary.

A blue circle with black lines and a black circle

Description automatically generated**a.**  Find the volume of the sphere in terms of *x* and . 

**b.**  Find the volume of the sphere if *x* = 5 centimeters..

11-7 Exit Slip – Volumes of Cylinders, Cones, and Spheres

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

1. Find the volume of a cylinder with a diameter of 16x inches and a height of 12x – 3 inches.
2. Find the volume of the cylinder in terms of *x* and .

**b.**  Find the volume of the cylinder if *x* = 2 inches. Round your answer to the nearest tenth.

A blue cone with pink dotted lines

Description automatically generated

1. Examine the cone. Round your answer to the nearest tenth, if necessary.

**a.** Find the volume of the cone in terms of *x* and **.**

**b.** Find the volume of the cone if *x* = 7 meters.

1. A blue circle with a black dotted line and a black dotted line

   Description automatically generatedExamine the sphere. Round your answer to the nearest tenth, if necessary.

**a.**  Find the volume of the sphere in terms of *x* and . 

**b.**  Find the volume of the sphere if *x* = 3 centimeters.