11-1 Opener - Area of Quadrilaterals

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

1. Find the area of the given figures.







**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.





**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. Find the area of the polygons.



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.

.

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



11-2 Exit Slip – Area of Regular Polygons

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

1. Find the area of the polygons.



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.

.

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



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.





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



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.



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





11-6 Opener – 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.

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

**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.



 **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 $π$ .

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



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 $π$**.**

**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.**  Find the volume of the sphere in terms of *x* and $π$.

**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 $π$ .

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



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 $π$**.**

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

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

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

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