Name	Period	Date

Lengths, Areas, and Volumes

Use your MCAS Reference Sheet for the formulas needed to solve the following problems. In all cases:

- Write out the formula first (before you substitute in)
- Show all work/thinking
- Round to the nearest hundredth
- Use the approximation 3.14 in place of π
- Circle your final answer, include units
- 1. What is the circumference and area of the circle to the right?



- 2. If the area of a square is 324 cm², what is the perimeter?
- 3. This triangle to the right has an area of 112mm², what is the height?



Find the area of the following figures:









Find the area <u>and</u> perimeter of the following figures:







12. Which figure below has the greatest amount of shaded area?



- 13. The diagram below shows the circular surface of a pond being designed for a park with a walkway around the pond.
 - a. What is the circumference of the pond?
 - b. What is the surface area of the pond?
 - c. A walkway 10 feet wide is being designed to go around the pond. What will be the area in square feet of the walkway?

14. What is the surface area of a cube with a side length equal to 11 feet?

15. What is the surface area of the pyramid below?





16. What is the volume and surface area of the cylinder?

17. What is the volume and surface area of the triangular prism?

18. What is the volume and surface area of the rectangular prism?

19. A cylinder with a radius of 4 meters has a volume of 351.68 cubic meters. What is the height of the cylinder?



9 m

1 m





20. Calculate the perimeter and area.

