RAWLINSON ROAD MIDDLE SCHOOL- Home of Raider PRIDE

Student Name: _____   Date: _____

Course: 8th grade Pre-Algebra _____   **Teacher:** Abernethy

Teacher Office Hours: 10:00 – 12:00   **Teacher Email:** eabernethy@rhmail.org

Other form of contact if help is needed: text or call me - 8034176228

Instructions to complete the student packet:
- Read the notes
- Complete the two worksheets.
- Complete the choice board – choose one from each row.

Instructions to submit work:
From a phone, use your NOTES APP and click:
- Scan documents
- Keep scan
- Save
- Then in the upper right corner click the send arrow pointed up
- Send as a message by clicking on the green message button.
- Text it to me at 803-417-6228, email me at eabernethy@rhmail.org, or submit it on Canvas.

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Technology

Laptop issues: please **email** the help desk- **helpdesk@rhmail.org** or **phone** at **(803)981-3531** and include the following information:

> **Student ID** number (ex: RS12345)

> **Parent/Guardian name,** Parent/Guardian email and phone number contact information.

> **School Name / Teacher name**

> **A description of the problem with the computer**

The Rock Hill Schools Technology Department Staff will be on call between the hours of 8AM - 8PM

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Launchpad: https://launchpad.classlink.com/rockhill   **Canvas:** https://rockhill.instructure.com/login/canvas

** For more information on remote learning, please visit:

RRMS website at https://www.rock-hill.k12.sc.us/domain/2596 or

RHS District website at: https://www.rock-hill.k12.sc.us/elearning

VOLUME OF CONES, CYLINDERS, & SPHERES

N OT E S (VOLUMEN DE CONOS, CILINDROS Y ESFERAS)

CONES (CONOS)

22 mi

11 mi
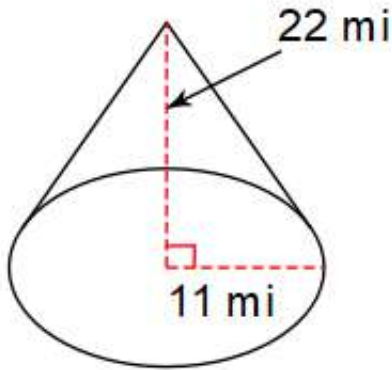
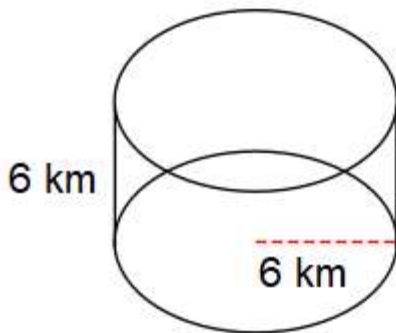Find the volume of the cone. (encuentra el volumen del cono)

$$V = \frac{\pi r^2 h}{3}$$

$$V = \frac{\pi(11^2)(22)}{3}$$

$$V = 2787.6 \, mi^3$$

Unit of measurement must carry an exponent of 3 (third power).

La unidad de medida debe tener un exponente de 3 (tercera potencia).

CYLINDERS (CILINDROS)

6 km

6 km

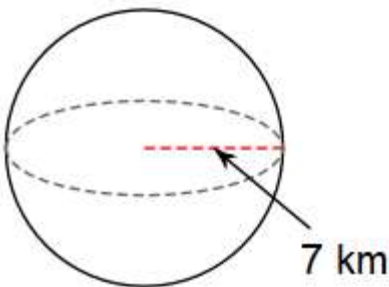Find the volume of the cylinder. (encuentra el volumen del cilindro)

$$V = \pi r^2 h$$

$$V = \pi(6^2)(6)$$

$$V = 678.6 \, km^3$$

Unit of measurement must carry an exponent of 3 (third power).

La unidad de medida debe tener un exponente de 3 (tercera potencia).

SPERES (ESFERAS)

7 km

Find the volume of the spheree. (encuentra el volumen del esferas)

$$V = \frac{4\pi r^3}{3}$$

$$V = \frac{4\pi(7^3)}{3}$$

$$V = 1436.8 \, km^3$$

Unit of measurement must carry an exponent of 3 (third power).

La unidad de medida debe tener un exponente de 3 (tercera potencia).
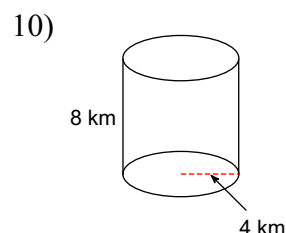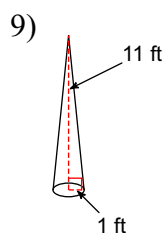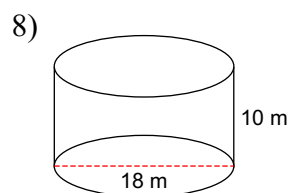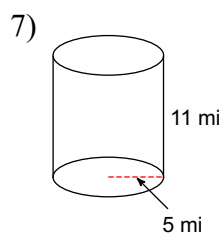
DAY 1 PRACTICE

Name_____ ID: 1

Volume of Cylinders, Cones & Spheres

Date_____ Period_____

Find the volume of each figure. Round to the nearest tenth.

1)

12 ft
4 ft

2)

12 cm

3)

5.9 km

4)

4.7 mi

5)

2 in

6)

4 in
8 in

7)

11 mi

5 mi

8)

10 m
18 m

9)

11 ft

1 ft

10)

8 km

4 km
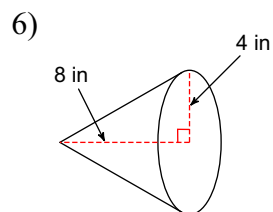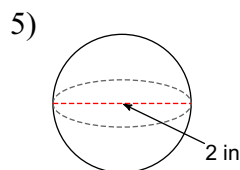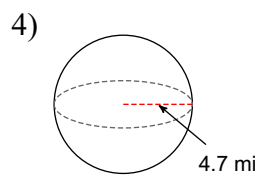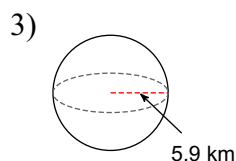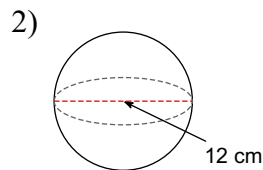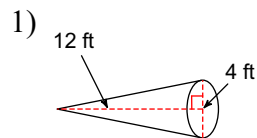
DAY 2 PRACTICE

Volumes of Cones, Cylinders, and Spheres - Independent Practice Worksheet

1. A cylindrical well has a radius of 10 feet and a height of 15 feet. What volume of water will it take to fill in the well?

2. The water pipe has a radius of 5 cm and a height of 7 cm. What volume of water does it take to fill the pipe?

3. Many villages have water tanks that they use for farming. Jeff's village has a cylinder shaped water tank that has a 4 m radius and a 9 m height. Find the volume of the cylinder.

4. For Anya's birthday her father gave out colorful birthday hats that were cone shaped. Anya was very happy that day. The opening of the bottom of the hat was 3 cm and the height of the cone was 7 cm. Anya fills her hat with candy. What is the approximate volume of candy?

5. The base of a cone shaped glass is 12 inches and it is 18 inches tall. You fill the glass with soda pop to the top of the glass. What is the volume of soda pop?

6. A guest house is in the shape of a cone. The house is 7.5 feet high, 22 feet long. Find the volume of air that occupies the house, assuming it is empty.

7. A baseball has a 45 cm diameter. What is the volume of the contents of the ball?

8. A small sphere shaped jar has a 8 cm radius. What is the volume of the bowl?

9. Find the volume of a sphere whose r is 20 inches?

10. The tennis ball has a radius of 12 cm. Calculate the volume of the tennis ball.

Tons of Free Math Worksheets at: © www.mathworksheetsland.com

VOLUME CHOICE BOARD
Choose only one from each row to complete each day.

Row 1 Day 3 – April 13th	Make a _POWERPOINT_ presentation showing how to find the volume of a cylinder in real-world and mathematical problems	Write a _LETTER_ to a friend helping them find the volume of a cylinder in real-world and mathematical problems.	Create _COMIC STRIP_ with at least 8 boxes of finding the volume of a cylinder in real-world and mathematical problems.
Row 2 Day 4- April 14th	Create a _TikTok_ showing how to find the volume of a cone in real-world and mathematical problems.	Write a _PARAGRAPH_ explaining how the volume of a sphere in real-world and mathematical problems.	Create a _STORY BOOK_ with at least 3 pages of solving real-world cone volume problems.
Row 3 Day 5 – April 15th	Create a _POSTER_ (can be computer paper) showing the step to find the volume of a sphere in real-world and mathematical problems.	Write a _SONG/RAP_ explaining how to find the volume of a sphere in real-world and mathematical problems. Bonus points if you record it and send it to me.	Create a _QUIZ_ and answer key with 20 problems finding the volume of spheres in real-world and mathematical problems.

Directions to scan documents using an iPhone

1. Launch the **Notes app** on your iPhone or iPad.

2. Create a **New Note**.

3. Tap the **More** button just above the keyboard. It looks like a plus (+) symbol.

4. Tap **Scan Document** from the list of options.

5. Line up the **document** you want to scan.

6. If the scanner doesn't automatically scan, tap the **shutter button** to manually scan the document.

7. Repeat the **step above** for each page you want to scan for a single document.

8. Tap **Save** when you've scanned all of the pages you want to include with one document.

9. Send these to your computer to upload to my canvas