

TUESDAY, MAY 31ST

8 DAYS AND COUNTING...

TODAY'S AGENDA ~

CORRECT VOLUME OF

CYLINDERS WORKSHEET

REVIEW

QUIZ - CIRCLES AND CYLINDERS

HOMEWORK: NONE :)

Student Name: _____

Score: _____

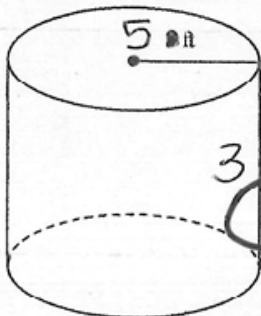
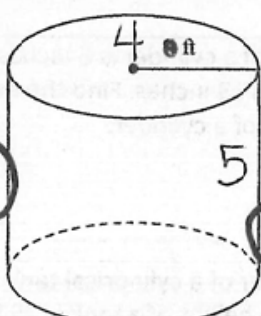
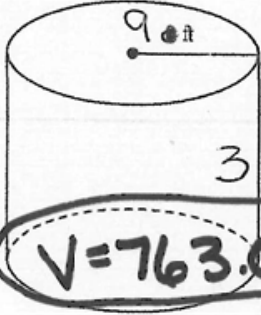
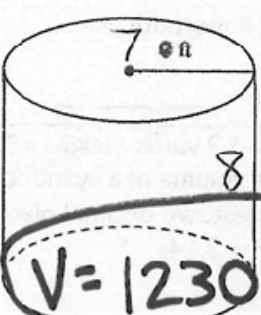
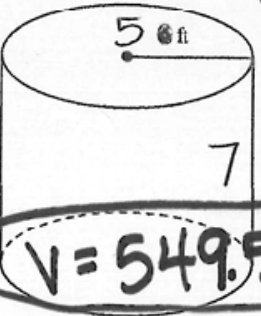
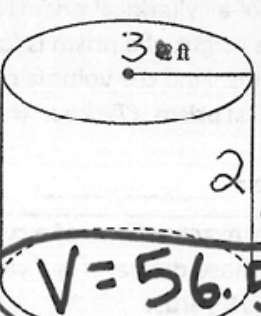
Volume of a Cylindrical Prism

Work Space

<p>① Radius of a cylinder is 6 inches and the height is 13 inches. Find the exact volume of a cylinder.</p> <p>Volume = <u>1469.52 in³</u></p>	$V = \pi \cdot r^2 \cdot h$ $V = \pi \cdot 6^2 \cdot 13$
<p>② Diameter of a cylindrical tank is 9 feet and the height of a tank is 25 feet. Find the volume of the cylindrical tank to the nearest hundredth place.</p> <p>Volume = <u>1589.63 ft³</u></p>	$R = 9 \div 2 = 4.5$ $V = \pi \cdot r^2 \cdot h$ $V = \pi \cdot 4.5^2 \cdot 25$
<p>③ Radius = 1.2 yards; Height = 3.4 yards. Find the volume of a cylindrical prism to the nearest two decimal places. (Take $\pi = 3.14$)</p> <p>Volume = <u>15.37 yd³</u></p>	$V = \pi \cdot 1.2^2 \cdot 3.4$
<p>④ Radius of a cylindrical prism is 2 inches and the height of a prism is four times the radius. Find the volume of a cylindrical prism. (Take $\pi = 3.14$)</p> <p>Volume = <u>100.48 in³</u></p>	$V = \pi \cdot r^2 \cdot h$ $V = \pi \cdot 2^2 \cdot 8$ $h = 2 \cdot 4 = 8$
<p>⑤ Find the exact volume of a cylindrical prism whose diameter is 7 yards and the height is 8 yards.</p> <p>Volume = <u>307.72 yd³</u></p>	$V = \pi \cdot r^2 \cdot h$ $V = \pi \cdot 3.5^2 \cdot 8$ $R = 7 \div 2 = 3.5$

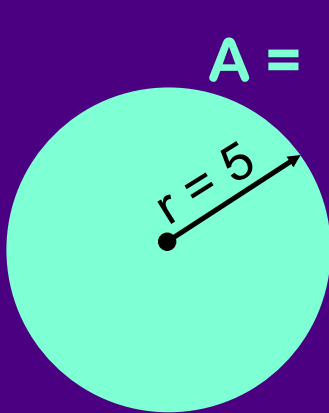
Cylinder Volume

Find the Volume of the Cylinders.

1.		$V = \pi r^2 h$ $V = \pi \cdot 5^2 \cdot 3$ $V = 235.5 \text{ ft}^3$	4.		$V = \pi r^2 h$ $V = \pi \cdot 4^2 \cdot 5$ $V = 251.2 \text{ ft}^3$
2.		$V = \pi \cdot r^2 \cdot h$ $V = \pi \cdot 9^2 \cdot 3$ $V = 763.02 \text{ ft}^3$	5.		$V = \pi \cdot r^2 \cdot h$ $V = \pi \cdot 7^2 \cdot 8$ $V = 1230.88 \text{ ft}^3$
3.		$V = \pi \cdot r^2 \cdot h$ $V = \pi \cdot 5^2 \cdot 7$ $V = 549.5 \text{ ft}^3$	6.		$V = \pi \cdot r^2 \cdot h$ $V = \pi \cdot 3^2 \cdot 2$ $V = 56.52 \text{ ft}^3$

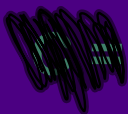
Review ~ Circles & Cylinders

Find the area and circumference of each circle.



A =

$$\begin{aligned}C &= 2\pi r \\ &= 2\pi 5 \\ &= 31.4\end{aligned}$$

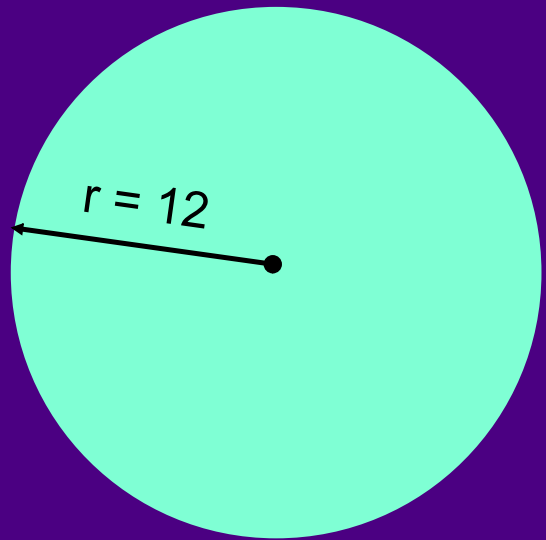

$$\begin{aligned}A &= \pi r^2 \\ &= \pi 5^2 \\ &= 78.5\end{aligned}$$

A =



$$\begin{aligned}A &= \pi r^2 \\ &= \pi 1.5^2 \\ &= 7.07\end{aligned}$$

$$\begin{aligned}C &= 2\pi r \\ &= 2\pi 1.5 \\ &= 9.42\end{aligned}$$



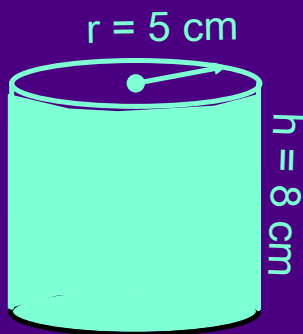
$$\begin{aligned}A &= \pi r^2 & C &= 2\pi r \\ &= \pi 12^2 & &= 2\pi 12 \\ &= 452.16 & &= 75.36\end{aligned}$$

A =

C =

Review ~ Circles & Cylinders

Find the volume and surface area of each cylinder.

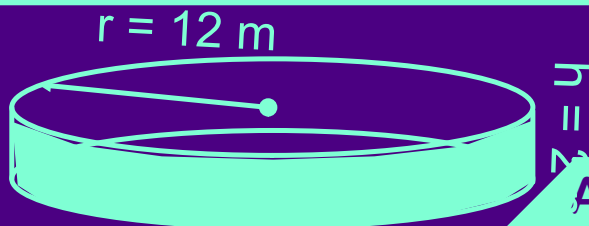
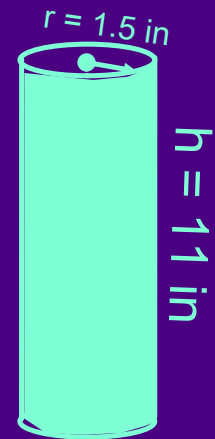


$$V = \pi r^2 h = \pi 5^2 8 = 628 \text{ cm}^3$$

$$\begin{aligned} A &= 2\pi r h + 2\pi r^2 \\ &= 2\pi 5 \cdot 8 + 2\pi 5^2 \\ &= 408.2 \text{ cm}^2 \end{aligned}$$

$$V = \pi r^2 h = \pi 1.5^2 11 = 77.72 \text{ in}^3$$

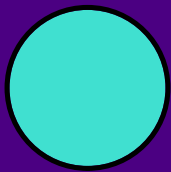
$$\begin{aligned} A &= 2\pi r h + 2\pi r^2 \\ &= 2\pi 1.5 \cdot 11 + 2\pi 1.5^2 \\ &= 117.75 \text{ in}^2 \end{aligned}$$



$$\begin{aligned} A &= 2\pi r h + 2\pi r^2 \\ &= 2\pi 12 \cdot 2 + 2\pi 12^2 \\ &= 1055.04 \text{ m}^2 \end{aligned}$$

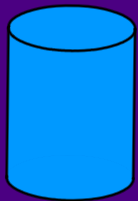
$$V = \pi r^2 h = \pi 12^2 2 = 904.32 \text{ m}^3$$

ANY QUESTIONS??



$$C = \pi d = 2r\pi$$

$$A = \pi r^2$$



$$A = 2\pi rh + 2\pi r^2$$

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

QUIZ TIME

YOU MAY USE...

- ~ YOUR EXAMPLE AND VOCAB. BOOKS
- ~ A CALCULATOR

WHEN YOU FINISH...

- ~ PUT YOUR QUIZ IN THE SORTER
- ~ DO SOMETHING SILENT FOR THE REST OF CLASS