Get out HW

Daily HW Check:
(5pt) Original Problem
(3pt) Work that makes sense
(2pt) Answer

When HW check is completed, begin warm-up

Warm-Up Tuesday 4/21

Non-Calculator

1. In which table is y a linear function of x?

A.

x	y
0	0
2	4
-2	4

B.

x	y
0	0
1	1
-2	2

C.

x	y
0	-4
2	-3
-4	-6

D.

x	y
0	0
1	2
1	3

2. Which number is an inte

A. $-\frac{1}{2}$

B. $\sqrt{\frac{4}{9}}$

C. -0.5

D. $\sqrt{64}$

3. Which number is greater than 7 but less than

A. $\sqrt{55}$

B. $\sqrt{35}$

C. $\sqrt{15}$

4. What is the value of $\frac{3.0 \times}{1.5 \times}$

A. 2,000

B. 4,500

C. 15,000,000

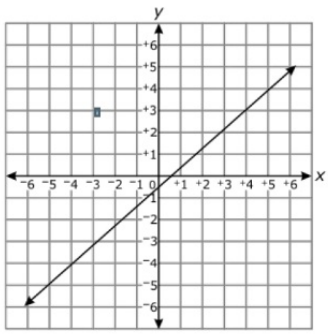
D. 20,000,000

Warm-Up Wednesday 4/22 No Calculators!

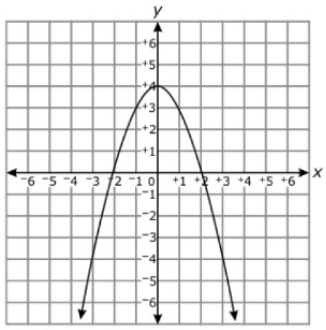
lve the equation $15a+5=5(3a-2)$ for a. Show your work. State whethe
e equation has one solution, no solutions, or infinitely many solutions
the equation has one solution, identify that solution. If the equation
s no solutions, or infinitely many solutions, justify your choice.

2. In which graph is y a nonlinear function of x?

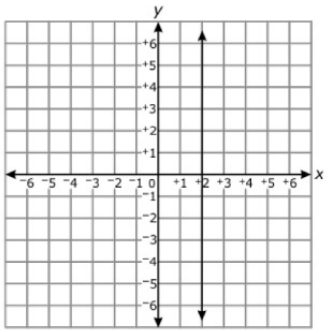
A.



B.



C.



3. Which function is linear?

A. $y = \frac{1}{x} - 8$

B. $y = x - 8$

C. $y = \sqrt{x} - 8$

D. $y = x^2 - 8$

4. What is the value of the expression $\frac{2^{-6}}{2^4} \times 2^8$?

A. $\frac{1}{16}$

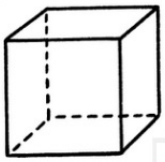
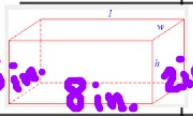
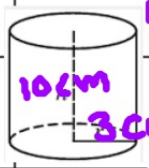
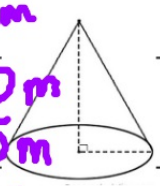
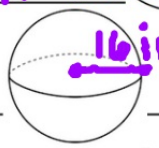
B. $\frac{1}{4}$

C. 4

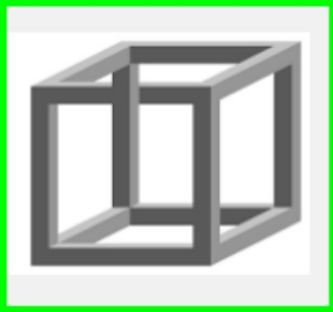
D. 16

Homework Check
on the back
bottom right square
#5

Volume

3D Figure	Illustration	Formula	Example
cube		$V = s^3$	$s = 9m$ $V = 9^3 = 729 m^3$
rectangular prism		$V = lwh$	$V = 8(2)(5)$ $V = 80\ in.^3$
cylinder		$V = \pi r^2 h$	$V = (3.14)(3)^2(10)$ $V = 282.6\ cm^3$
cone		$V = \frac{1}{3}\pi r^2 h$	$V = \frac{1}{3}(3.14)(5)^2(2$ $V = 654.17 m^3$
sphere		$V = \frac{4}{3}\pi r^3$	$V = \frac{4}{3}(3.14)(16)^3$ $V = 17,148.59$
hemisphere		$V = \frac{2}{3}\pi r^3$	$V = \frac{2}{3}(3.14)(16)^3$ $V = 8574.29\ in.^3$

When solving word problems...



C- Circle key numbers
U- Underline the question
B- Box math action words
E- Evaluate (What steps should I take?)
S- Solve (Does my answer make sense?)

Volume Word Problems

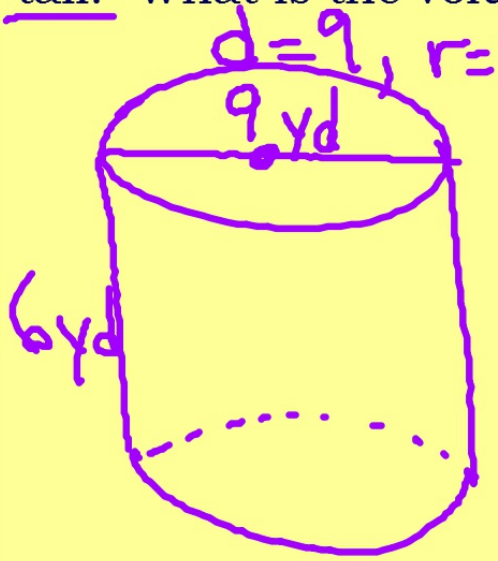
1) A rectangular box is 10 ft by 20 ft. The height is 5 ft. What is the volume of the box?

$V = lwh$

$V = (10)(20)(5)$

$V = 1000\ ft^3$

2) A swimming pool has a diameter of 9 yards and 6 yards tall. What is the volume of water needed to fill the pool?



$V = \pi r^2 h$

$V = (3.14)(4.5)^2(6)$

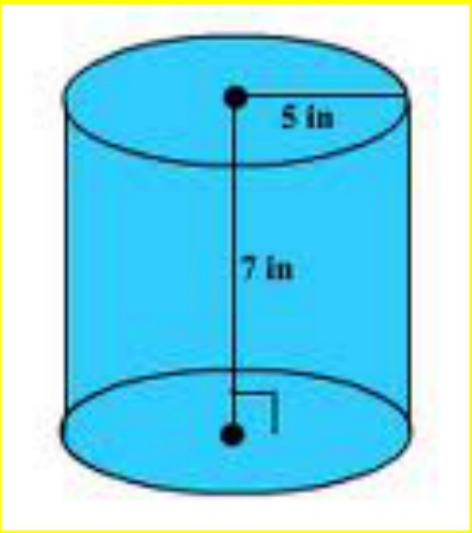
$V = 381.51\ yd^3$

3. What is the volume of an ice cream cone that is 4.5 inches high and has a *diameter* of 3 inches?

$V = \frac{1}{3}\pi r^2 h$ $d = 3$, $r = 1.5$

$V = \frac{1}{3}(3.14)(1.5)^2(4.5)$

$V = 10.60 \text{ in.}^3$

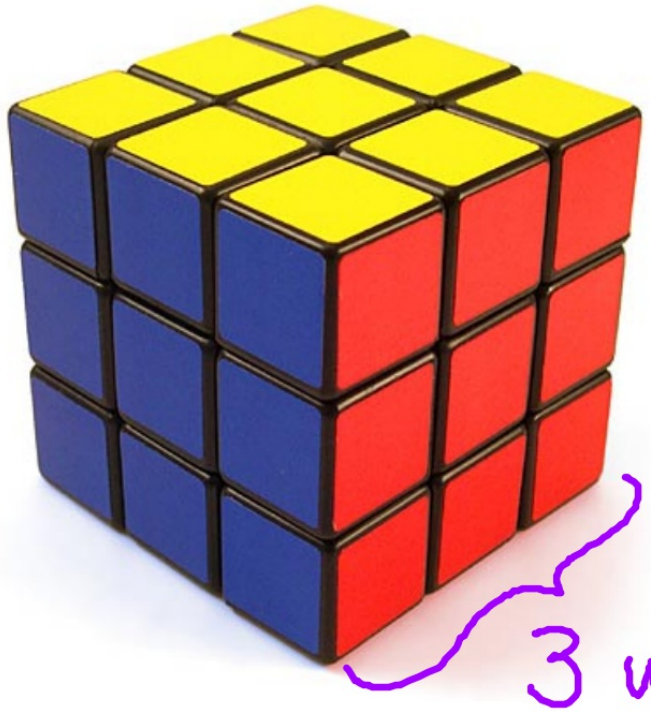


4. Ms. Williams needs to fill this container with Nitric Acid. How much would it hold?

$V = \pi r^2 h$

$V = 3.14(5)^2(7)$

$V = 549.5 \text{ in.}^3$



3 units

5. Find the volume of the rubik's cube.

$V = s^3$

$V = 3^3$

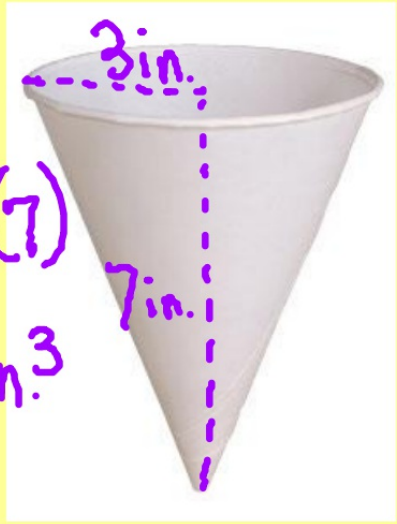
$V = 27 \text{ units}^3$

6. Lisa has a water container shaped like a cone that is 7 inches high and has a radius of 3 inches. She is using this water container to fill a barrel that holds 900 cubic inches of water. How many full cones of water will it take to fill the barrel?

$V = \frac{1}{3}\pi r^2 h$

$V = \frac{1}{3}(3.14)(3)^2(7)$

$V = 65.94 \text{ in}^3$



$\frac{900}{65.94} = 13.65$

14 cones

7. The volume of a sphere is 2,400 cubic centimeters. What is the approximate diameter of this sphere? ($V = \frac{4}{3}\pi r^3$)

A) 16.6 cm
B) 10.1cm
C)8.3 cm
D) 4.2 cm

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

$2400 = \frac{4}{3}\pi r^3$

$7200 = 4\pi r^3$

$\frac{7200}{4\pi} = \frac{4\pi r^3}{4\pi}$

$572.9 = r^3$

$8.3 = r$

$2(8.3)$

16.6