

## 8th Grade Review



- I can use & apply the skills learned through Lesson 60.

A paper box holds 12 reams of paper. If 3600 boxes are on the truck, how many reams of paper are on the truck?

$$3600 \text{ boxes} \cdot \frac{12 \text{ reams}}{1 \text{ box}} = 43,200 \text{ reams}$$

If we have 1236 reams of paper, how many boxes do we need to hold all the paper?

$$\begin{array}{r} 103 \\ 1236 \end{array} \text{ reams} \cdot \frac{1 \text{ box}}{12 \text{ reams}} = 103 \text{ boxes}$$

The Hill family traveled 660 miles in 12 hours. If they traveled at the same rate on a different day, how far could they go in 9 hours?

$$9 \text{ hrs} \cdot \frac{660 \text{ mi}}{12 \text{ hr}} = 495 \text{ mi}$$

The machine bottled 8,000 bottles in 4 hours. At this rate, how long would it take to bottle 50,000 bottles?

$$50,000 \text{ bottles} \cdot \frac{1 \text{ hr}}{8,000 \text{ bot.}} = 25 \text{ hr.}$$

Complete the table. Begin by inserting the reference numbers.

	FRACTION	DECIMAL	PERCENT
Ref →	$\frac{51}{100}$	0.51	51%
	$\frac{12}{100} = \frac{3}{25}$	0.12	12%
	$\frac{5}{6}$	$0.8\bar{3}$	$83\frac{1}{3}\%$

$$6 \overline{) 5.000} \begin{array}{r} .833 \\ 48 \\ \hline 20 \\ 18 \\ \hline 20 \\ 18 \\ \hline 2 \end{array}$$

83.333

Write 532,000,000,000 in scientific notation.

$$5.32 \cdot 10^{11}$$

Write  $8.05 \times 10^{-5}$  in standard notation.

$$\begin{array}{l} \underline{00008.05} \\ 0.0000805 \end{array}$$

Write 0.00000000456 in scientific notation.

$$4.56 \cdot 10^{-9}$$

What is 1% of 18.3?

$$0.183$$

What is 95% of 18.3?

$$17.385$$

$$\begin{array}{r} 0.183 \\ \times 95 \\ \hline \end{array}$$

What is 120% of 18.3?

$$21.96$$

$$\begin{array}{r} 0.183 \\ \times 120 \\ \hline \end{array}$$

Use two unit multipliers to convert 16,000 square meters to square centimeters.

$$16,000 \text{ m}^2 \cdot \frac{100 \text{ cm}}{1 \text{ m}} \cdot \frac{100 \text{ cm}}{1 \text{ m}}$$

$$160,000,000 \text{ cm}^2$$

Use two unit multipliers to convert 30,000 square meters to square kilometers.

$$30,000 \text{ m}^2 \cdot \frac{1 \text{ km}}{1000 \text{ m}} \cdot \frac{1 \text{ km}}{1000 \text{ m}} = 0.03 \text{ km}^2$$

What is the circumference & area of a circle with a radius of 14 feet?

$$C = \pi d$$

$$d = 2r$$

$$C = 2r\pi$$

Use  $\pi$  instead of 3.14

$$A = \pi r^2$$

$$C = 28\pi \text{ ft}$$

$$A = 14^2 \pi = 196\pi \text{ ft}^2$$

Five and two thirds of what number is  $3\frac{1}{4}$ ?

$$5\frac{2}{3} \cdot A = 3\frac{1}{4}$$

$$\frac{3}{17} \cdot \frac{17}{3} \cdot A = \frac{13}{4} \cdot \frac{3}{17}$$

$$A = \frac{39}{68}$$

What fraction of  $8\frac{3}{4}$  is  $5\frac{1}{2}$ ?

$$F \cdot 8\frac{3}{4} = 5\frac{1}{2}$$

$$\frac{4}{35} \cdot F \cdot \frac{35}{4} = \frac{11}{8} \cdot \frac{42}{35}$$

$$F = \frac{22}{35}$$

## Assignment:

Pgs. 201-203 #1, 2, 6, 7, 9-12



## 8th Grade Review



- I can use & apply the skills learned through Lesson 60.

What is the surface area of the right solid? Dimensions are in meters.

$$SA = LA + 2B$$

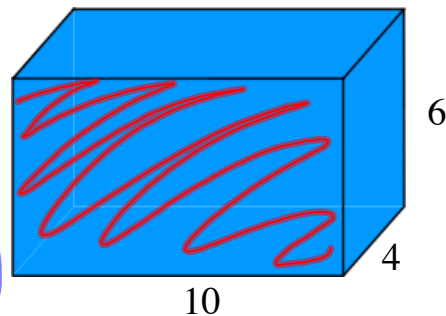
$$2B = 2(\text{area of base})$$

$$LA = (\text{perimeter of base}) (\text{height of solid})$$

$$LA = 32 \cdot 4 = \underline{128} \text{ m}^2$$

$$2B = 2 \cdot 60 = 120 \text{ m}^2$$

$$SA = 128 + 120 = 248 \text{ m}^2$$



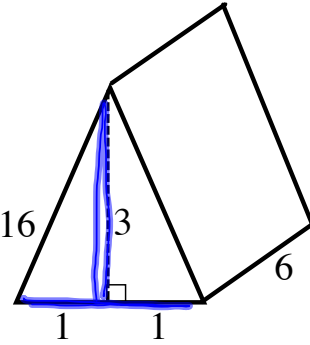
What is the surface area of the right solid? Dimensions are in meters.

$$SA = L.A + 2B$$

$$L.A = 8.32 \cdot 6 = 49.92 \text{ m}^2$$

$$B = \frac{2 \cdot 3}{2} = 3 \text{ m}^2$$

$$SA = 49.92 + 2(3) = 55.92 \text{ m}^2$$



$$2\frac{2}{5} + 3\frac{3}{5} \cdot 1\frac{1}{2}$$

$$2\frac{2}{5} + \frac{9}{5} \cdot \frac{3}{2}$$

$$2\frac{2}{5} + \frac{27}{10}$$

$$2\frac{2}{5} + 5\frac{2}{5}$$

$$7\frac{4}{5}$$

$$\sqrt[3]{27} + 2^2[2^3(\sqrt{25} - 2^2) - 2]$$

$$\sqrt[3]{27} + 2^2[2^3(5 - 4) - 2]$$

$$\sqrt[3]{27} + 2^2[2^3(1) - 2]$$

$$\sqrt[3]{27} + 2^2[8(1) - 2]$$

$$\sqrt[3]{27} + 2^2[8 - 2]$$

$$\sqrt[3]{27} + 2^2[6]$$

$$3 + 4(6)$$

$$3 + 24$$

$$27$$

$$\frac{1}{5} \left( 2\frac{1}{3} - \frac{1}{2} \right) + \frac{9}{10}$$

$$\frac{1}{5} \left( \frac{11}{6} \right) + \frac{9}{10}$$

$$\frac{11}{30} + \frac{9}{10} = \frac{27}{30}$$

$$\frac{38}{30} = \frac{19}{15}$$

$$2\frac{1}{3} = \frac{7}{3}$$

$$-\frac{1}{2} = \frac{1}{2}$$


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$$\frac{15}{6}$$

$$\frac{3\frac{3}{5}}{4\frac{1}{5}}$$

$$4\frac{1}{5}$$

$$\frac{18}{5} \div \frac{21}{5}$$

$$\frac{6 \times 18}{1 \times 21} = \frac{108}{21}$$

$$\frac{36}{7}$$

Evaluate:  $\sqrt[3]{x} + \sqrt[3]{27} + xy$  if  $x = 8$  and  $y = 3$

$$\sqrt[3]{8} + \sqrt[3]{27} + 8 \cdot 3$$

$$2 + 3 + 8 \cdot 3$$

$$2 + 3 + 24$$

$$5 + 24$$

$$29$$



$$\frac{\frac{5}{2}}{\frac{3}{4}} = \frac{12}{x}$$

$$\frac{5}{2}x = \frac{12^3}{\cancel{4}^3}$$

$$\frac{5}{2}x = \frac{9}{1} \cdot \frac{2}{5}$$

$$x = \frac{18}{5}$$

$$\frac{\frac{4}{7}}{\frac{3}{8}} = \frac{x}{\frac{7}{15}}$$

$$\frac{3}{8}x = \frac{4}{7} \cdot \frac{7}{15}$$

$$\frac{3}{8} \cdot \frac{3}{8}x = \frac{4}{15} \cdot \frac{8}{3}$$

$$x = \frac{32}{45}$$

$$\begin{array}{r} 2.6x = 60.84 \\ \underline{2.6} \quad \underline{2.6} \\ x = 23.4 \end{array}$$

$$\begin{array}{r} 23.4 \\ 2.6 \overline{) 60.84} \\ \underline{52} \phantom{00} \\ 88 \\ \underline{78} \phantom{00} \\ 104 \\ \underline{104} \\ 0 \end{array}$$

$$\begin{array}{r} x + 7.312 = 203,003.1 \\ \underline{-7.312} \quad \underline{-7.312} \\ x = 202,995.788 \end{array}$$

$$\begin{array}{r} 203,003.100 \\ \underline{-7.312} \\ 202,995.788 \end{array}$$

# Assignment:

Pgs. 201-203 #13 (below), 15, 16, *Tomorrow*  
20-23, 26-30 due ~~Friday~~;

Test #15 ~~tomorrow~~  
*Friday*



#13. Find the surface area of the right solid.

