

**Correctly answer each question. REVIEW**



\_\_\_\_\_ 1) Use the following data set to determine the MEAN 7.33, MEDIAN 7  
 LOWER QUARTILE 3, UPPER QUARTILE 12, RANGE 15

3, 2, 7, 6, 1, 8, 9, 4, 11, 5, 12, 15, 13, 14, 0

Write the data set in ascending order

0   1   2   3   4   5   6   7   8   9   11   12   13   14  
15

4 2) Simplify  $\frac{1}{3}(12-3)+1$

\_\_\_\_\_ 4) Store the following values in the given variables using the  and  keys:  
 $x = \sqrt{5}$ ,  $y = 5$ ,  $z = 3$

20 5)  $y^2 - x^2$       4.236 6)  $\frac{y}{\sqrt{5}} + 2$       -3 7)  $z - 6$

0.43 8) Round  $\frac{3}{7}$  to the nearest 100<sup>th</sup>.      3.3166 8a) Round  $\sqrt{11}$  to the nearest 10,000<sup>th</sup>

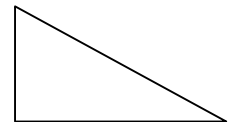
26.6 9) Divide  $453 \div 17$  and round your answer to the nearest 10<sup>th</sup>.

**SOLVING EQUATIONS AND INEQUALITIES.** Solve each equation. Show your steps!

10)  $\frac{4}{7}x + 3 = -9$       11)  $\frac{1}{5}x + 2 = -14$       12)  $-8x - 2 = 118$   
 $4/7x = -12$        $1/5x = -16$        $-8x = 120$   
 $x = -12 / (4/7)$        $x = -16 / (1/5)$   
 $x = -21$        $x = -80$

22/6 = 3.67 14) Your GPA is 3.83 because you received an A in English, an A in math, an A in history, an A in science, an A in P.E. and a B in Anthology.  
 What would your GPA be if your P.E. grade dropped to an B? (A=4, B=3, C=2, D=1, F=0)

22/6 = 3.67 15) Lisa measured the right triangle at right. The height is 0.6 inches and the base is 1.1 inches. Lisa used the Pythagorean Theorem to find the length of the hypotenuse and got 1.57 inches. Show how she did that.

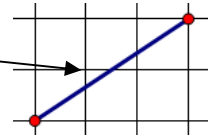


0.6^2 + 1.1^2 = 1.57. Square root of 1.57 = 1.253 So she got it wrong.

213 16) Marta had 354 coins in her savings bank. She had 97 quarters, 11 dimes, and 33 nickels. If the remaining coins were pennies, how many pennies did she have?

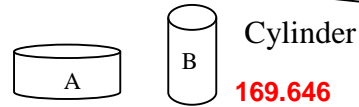
-6x + 8 17) Use the distributive property to simplify this expression:  $2(-3x + 4)$

3.605 18) In the grid at right, find the length of the “slanty line.”



19) Cylinder A has a radius of 5 cm and a height of 3 cm.

B has a radius of 3 cm and a height of 5 cm. **235.619**



**169.646**

Which one has the greater volume? A By how much is its volume greater? 65.97

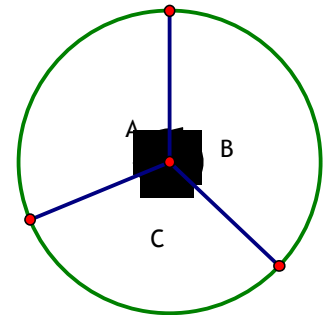
\$ 36.25 20) What is the sales tax (\$) on a \$500.00 purchase if the tax rate is 7.25%?

\$ 541.25 20b) What is the TOTAL COST including tax on a \$500.00 purchase if the tax rate is 8.25%?

\$ 77.41 21) You paid \$7.16 in sales tax on a purchase. The tax rate was 9.25%. How much did your item cost before sales tax?

11 22) Write the remainder from this division problem.  $59,701 \div 235$

122.4° 23) In the circle at right, Angle A is 34% of the whole circle. How many degrees is that?

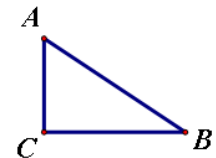


153.938 24) In the circle at right, if the radius is 7, find the area.

43.982 24b) In the circle at right, if the radius is 7, find the circumference.

4.5 cm<sup>3</sup> 25) Find the volume of a RECTANGULAR PRISM (BOX) that has a width of 3 cm, a length of  $\frac{1}{2}$  cm and a height of  $\sqrt{9}$  cm.

2.008 26) Find the height of the triangle at right if the hypotenuse is 3.61 and the base is 3.

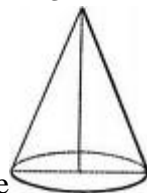


27) Convert each fraction to a percent.

$$\frac{4}{7} \underline{57.1\%} \quad \frac{3}{9} \underline{33.3\%} \quad \frac{11}{8} \underline{137.5\%} \quad \frac{9}{11} \underline{81.81\%}$$

Convert each percent to a REDUCED fraction:

$$5\frac{3}{7}\% \underline{19/350} \quad 21.2\% \underline{53/250} \quad 6\frac{2}{3}\% \underline{1/15}$$



29) Find the volume of this cone if the height is 6 and the radius is 5. Here's the formula:

$$Volume_{cone} = \frac{\pi r^2 h}{3} \quad \mathbf{157.08}$$