



Correctly answer each question.

_____ 1) Use the following data set to determine the MEAN _____, MEDIAN _____
LOWER QUARTILE _____, UPPER QUARTILE _____, RANGE _____

212, 119, 184, 132, 149, 168, 131, 180, 100, 130, 110, 83, 108

Write the data set in ascending order

_____ 2) Simplify $\frac{1}{2}(1-14)+1.5$

_____ 4) Store the following values in the given variables using the  and  keys:

$x = \sqrt{2}, y = \sqrt{3}, z = \pi$

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

_____ 8) Round $\frac{\sqrt{5}}{\sqrt{2}}$ to the nearest 100^{th} . _____ 8a) Round $\sqrt{8}$ to the nearest $10,000^{\text{th}}$

_____ 9) Divide $0.0378 \div 0.1$ and round your answer to the nearest 10^{th} .

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

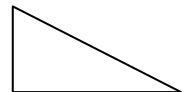
10) $\frac{4}{5}x + 5 = -7$

11) $\frac{9}{8}x + 3 = -15$

12) $-2x - 12 = 108$

_____ 14) Your GPA is 3.50 because you received an A in English, an A in math, an A in history, a B in science, a B in P.E. and a B in Anthology. What would your GPA be if you raised your Anthology grade to an A? (A=4, B=3, C=2, D=1, F=0)

_____ 15) Lisa and Tess each measured the right triangle at right. The height is 0.45 inches and the base is 0.88 inches. Lisa used the Pythagorean Theorem to find the length of the hypotenuse and got 0.988 inches. Tess measured and got 9.8 inches. Who was closer to the correct answer? Why? _____

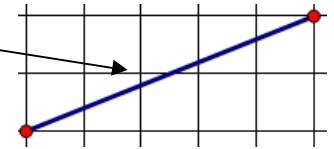
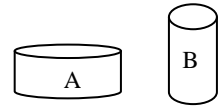


_____ 16) Marta had 154 coins in her savings bank. She had 87 quarters, 12 dimes, and 22 nickels. If the remaining coins were pennies, how many pennies did she have?

17) If you multiply using the DISTRIBUTIVE PROPERTY in this expression: $-2(-3x - 4)$ you get $6x + 8$. Why don't you get $-6x - 8$? _____

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

19) Cylinder A has a radius of 4 cm and a height of 2 cm.
Cylinder B has a radius of 2 cm and a height of 4 cm.



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

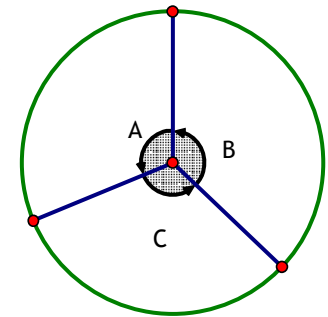
\$ _____ 20) What is the sales tax (\$) on a \$5000.00 purchase if the tax rate is 4.25%?

\$ _____ 20b) What is the TOTAL COST including tax on a \$5000.00 purchase if the tax rate is 4.25%?

\$ _____ 21) You paid \$1.16 in sales tax on a purchase. The tax rate was 8.25%. How much did your item cost before sales tax?

_____ 22) Write the remainder from this division problem. $259,100 \div 385$

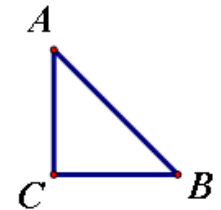
_____ 23) In the circle at right, Angle A is 26% of the whole circle. How many degrees is that?



_____ 24) In the circle at right, if Angle B is congruent to angle C, and Angle A was 110° , find the degree measure of Angle B and Angle C.

_____ 25) Find the volume of a RECTANGULAR PRISM (BOX) that has a width of 2.3 cm, a length of $3\frac{1}{6}$ cm and a height of $\sqrt{4}$ cm.
Round to the nearest tenth.

_____ 26) Find the height of the triangle at right if the hypotenuse is 2.83 and the base is 2.



27) Convert each fraction to a percent.

$\frac{5}{7}$ _____ $\frac{3}{8}$ _____ $\frac{10}{9}$ _____ $\frac{15}{5}$ _____

Convert each percent to a REDUCED fraction:

$6\frac{3}{7}\%$ _____ 21.5% _____ $8\frac{2}{3}\%$ _____



29) Find the volume of this cone if the height is 5 and the radius is 4.

Here's the formula: $Volume_{cone} = \frac{\pi r^2 h}{3}$

