1-28-10 Prealgebra Quiz #2 Name Key Hr.____

Correctly answer each question. Bonus questions are not required, but will add extra credit points.

1) In the following data set, find the MEAN: Key, MEDIAN: 116 MODE(s) (if any): 117

LOWER QUARTILE: 117 UPPER QUARTILE: 117 RANGE: 147-12=135

OUTLIERS (if any) 12, 147

12 118 112 112 117 116 117 117 110 99 117 112 119 110 147

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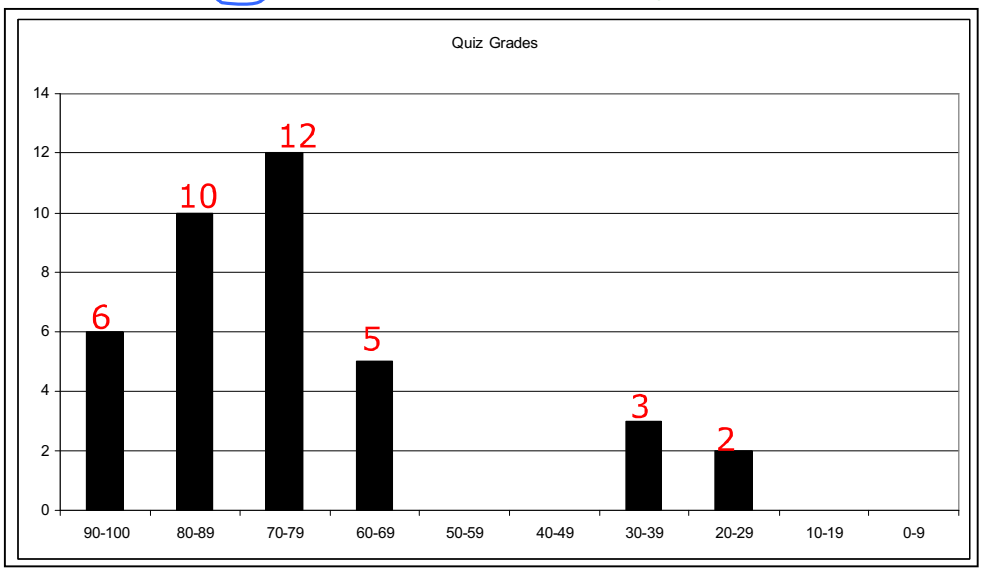
5 2) In the BAR graph at right, how many students failed the quiz?

1 3) In the graph at right, how many more students got As than got Ds?



9 4) Simplify: $3+3(5-3)$

3+3(5-3) 9

In questions 5-7 , use these values for x, y and z:

$x=0.5,\ y=4.5,\ z=0$

(x)^3+(y)^3 91.25 5) $(x)^3+(y)^3$

.5→x 4.5→y 0→z 0.5 4.5 0

z+y(10) 45 6) $z+y(10)$

-y+x -4 7) $-y+x$ 25^x 5 7b) 25^x

27→x -3→y x/y 27 -3 -9 7c) Store 27 in x. Store -3 in y. Find $\frac{x}{y}$

π 3.141592654 round(3.1415926,2) π 3.14 8) Round π to the nearest 100^{th}

√2 1.414[redacted] 8a) Round $\sqrt{2}$ to the nearest 1000^{th}

7.3 9) Divide $22 \div 3$ and round your answer to the nearest 10^{th}.

SOLVING EQUATIONS AND INEQUALITIES. Solve each equation. Show your steps! show your solution on the number line above the problem. (In the equations with fractions, don't forget to multiply by the reciprocal!)

10) $\frac{3}{4}x+7=22$

-7 -7

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

$\frac{3}{4}$ $\frac{3}{4}$

$x = 20$

11) $\frac{2}{3}x+1=-3$

-1 -1

$\frac{2}{3}x = -4$

$\frac{2}{3}$ $\frac{2}{3}$

$x=-6$

12) $-3x-5=1$

+5 +5

$-3x = 6$

-3 -3

$x=-2$

95.6 14) You scored a 99 on the first TWO QUIZZES. What would your new average be if you scored a 89 on the THIRD quiz? 99+99+89 = 287 287÷3 =

15) YES (NO) she would get 50 Lisa rounded 4.96 and 9.95 and multiplied them. Her estimated answer was 40. Was that a good estimate? Explain. 5 × 10 = 50

22% 16) If a marine biologist collected 50 bluegills and 11 of them were over 5 inches in length, what percent of the bluegills were over 5 inches in length? 11÷50 = 0.22

C 17) If you multiply using the DISTRIBUTIVE PROPERTY in this expression: $-3(2x+1)$ which of the following would you get?

a) $a)\ -6x+4$ $b)\ 6x+3$ $c)\ -6x-3$ $d)\ 6x-3$

1/8 18) Simplify $\left(\frac{1}{2}\right)^3$

5 18b) Simplify $|25-30|$

C 19) Which of the following shows this expression simplified? $10x+9+7x-3$ 17x 6

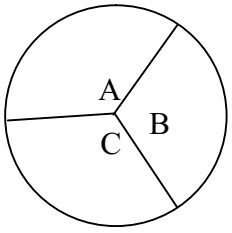
$a)\ 3x+12$ $b)\ 3x+6$ $c)\ 17x+6$ $d)\ 17x+12$

$1.31 20) What is the sales tax ($) on a $25.00 purchase if the tax rate is 5.25%? 25 × 5.25% =

r 8 22) Use 2nd int÷ to find the remainder in this division problem: 19 | 2117

120° 23) In the circle at right, Angle A is 120°, and Angle C is 120°. Find the measure of Angle B.

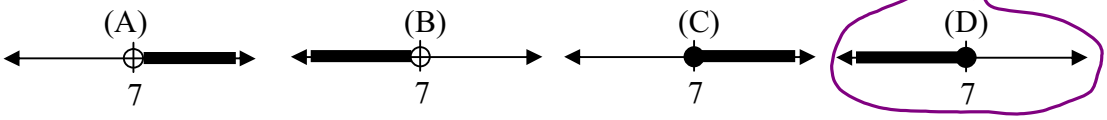
33.3% 24) In the circle at right, if Angle A is 120°, what percent of the circle is that? Hint: Divide 120 by 360 and change to a %.



9/5×20+32 68 25) Find the Fahrenheit temperature if the Celsius temperature is 20°.

Use the formula $F=\frac{9}{5}C+32$

D 26) In the inequality $x \le 7$ which of the following would be the correct graph of the solution?



27) Convert each fraction to a percent by dividing the top number by the bottom number and moving the decimal point 2 places to the right. Show repeating decimals like this. If your display says 8.1111111 = $8.\overline{1}$

$\frac{1}{4}$ 25% $\frac{2}{3}$ 66.6% $\frac{4}{5}$ 80% $\frac{11}{6}$ 183.3% $\frac{13}{10}$ 130%

28) Convert each percent to a REDUCED fraction: Type each fraction. Press the convert button  .

$33\frac{1}{3}\%$ 1/3 15% 3/20 35% 7/20 $66\frac{2}{3}\%$ 2/3