

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

1123.3repeat

16850 divided by 15 1) In the following data set, find the MEAN: \_\_\_\_\_, MEDIAN: 1160 MODE(s) (if any): 1170  
 LOWER QUARTILE: 1100 UPPER QUARTILE: 1170 RANGE: Big - small = 1970-120  
 OUTLIERS (if any) 120, 1970

120 1,180 1,120 1,120 1,170 1,160 1,170 1,170 1,100 990 1,170 1,120 1,190 1,100 1,970  
120 990 1100 1100 1120 1120 1120 1160 1170 1170 1170 1170 1170 1180 1190 1970

16 2) In the BAR graph at right, how many students got an A or a B on the quiz?

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

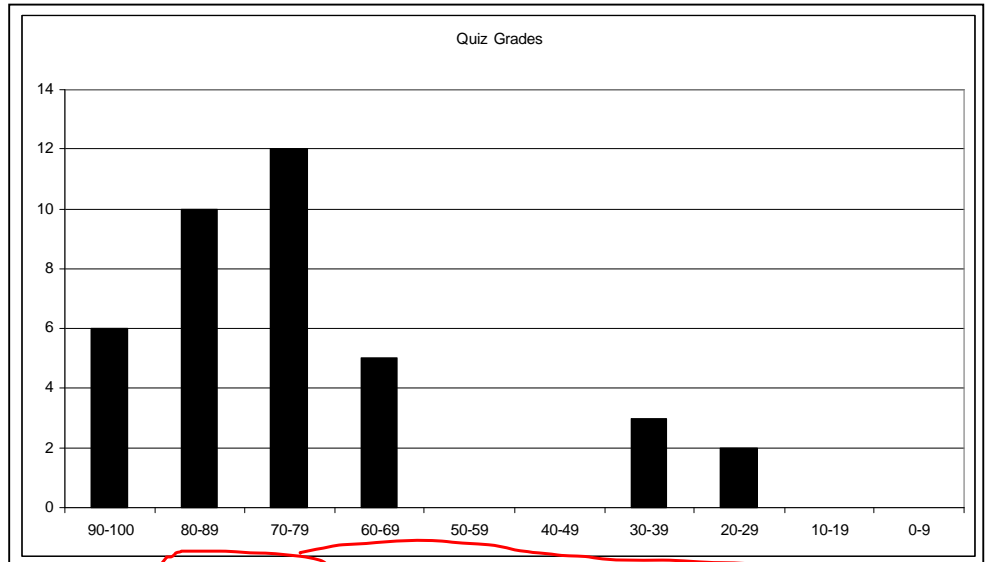
4 4) Simplify:  $10 - 1(8 - 2)$

In questions 5-7, use these values for x, y and z:  
 $x = 1.5, y = 6.5, z = 0$

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

65 6)  $z + y(10)$

-5 7)  $-y + x$



1.5 "sto>" x ENTER  
 6.5 "sto>" xx ENTER 0 "STO>" XXX ENTER

5 7b)  $25^{(x-1)}$

-9 7c) Store 45 in x. Store -5 in y. Find  $\frac{x}{y}$

4.58 8) Round  $\sqrt{21}$  to the nearest 100<sup>th</sup>. ERROR 8a) \*Round  $\sqrt{-4}$  to the nearest 1000<sup>th</sup>

0.1 9) Divide  $3 \div 22$  and round your answer to the nearest 10<sup>th</sup>.

**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)  $\frac{2}{5}x + 11 = 23$   
 $-11 \quad -11$   
 $\frac{2}{5}x = 12$   
 $\frac{5}{2} \cdot \frac{2}{5}x = \frac{5}{2} \cdot 12$   
 $x = 30$

11)  $\frac{1}{8}x + 9 = -2$   
 $-9 \quad -9$   
 $\frac{1}{8}x = -11$   
 $\frac{8}{1} \cdot \frac{1}{8}x = \frac{8}{1} \cdot -11$   
 $x = -88$

12)  $-4x - 6 = 2$   
 $+6 \quad +6$   
 $-4x = 8$   
 $-\frac{1}{4}x = \frac{8}{-4}$   
 $x = -2$

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?  $(99 + 99 + 89) \div 3 = \underline{\quad\quad}$

15) YES NO Lisa rounded 7.96 and 9.95 and multiplied them. Her estimated answer was 70. Was that a good estimate? Explain.

22% 16) If a herpetologist collected 50 tortoises and 11 of them were over 50 inches in length, what percent of the tortoises were over 50 inches in length?  $11 \div 50 = 0.22$  2nd %

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

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

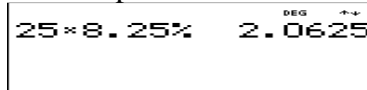
1/27 18) Simplify  $(\frac{1}{3})^3$

5 18b) Simplify  $|25-30|$  18c) The straight lines mean "absolute value"

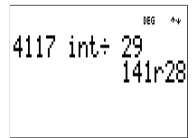
B 19) Which of the following shows this expression simplified?  $14x+90-17x-30$

- a)  $3x+60$  b)  $-3x+60$  c)  $31x+60$  d)  $31x+120$

\$          20) What is the sales tax (\$) on a \$25.00 purchase if the tax rate is 8.25%?



r28 22) Use to find the remainder in this division problem:  $29 \overline{)4117}$

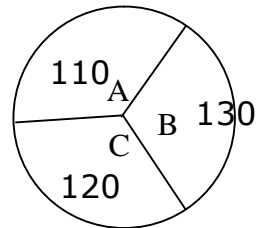


130 23) In the circle at right, Angle A is  $110^\circ$ , and Angle C is  $120^\circ$ .

Find the measure of Angle B.  $360 - (110 + 120)$

24) In the circle at right, if Angle A is  $110^\circ$ , what percent of the circle is that? Hint: Divide 110 by 360 and change to %.

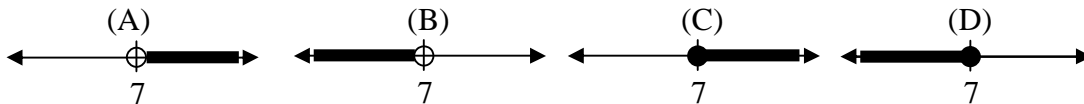
$110/360 = 30.5\text{repeat \%}$



25) Find the Fahrenheit temperature if the Celsius temperature is  $-40^\circ$ .

Use the formula  $F = \frac{9}{5}C + 32$   $9/5 * -40 + 32 = -40$

A 26) In the inequality  $x > 7$  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  $8.1111111 = 8.\bar{1}$

$\frac{5}{4} = 125\%$   $\frac{4}{3} = 133.3R\%$   $\frac{2}{5} = 40\%$   $\frac{7}{6} = 116.6R\%$   $\frac{9}{10} = 90\%$

$5/4 = 1.25$   $4/3 = 1.3R$   $2/5 = 0.4$   $7/6 = \quad$   **$9/10 = 0.9$**



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

$12\frac{1}{2}\%$   $0.5\%$   $45\%$   $16\frac{2}{3}\%$

$12.5/100 = 1/8$   $0.5/100 = 5/100 = 1/20$   $45/100 = 9/20$   $50/300 = 1/6$