Name:_____ Per:_____

See me if you don't know how I got an answer!

Honors I – Chapters 1 & 2 Practice Test **SHOW ALL YOUR WORK**

Evaluate or simplify each expression.

1. $\frac{3+7^2(5-2)}{5^2-10}$

10

2. $4|2x+7|+3x \text{ when } x=-2$

6

3. $(2x-15)(-3)$

$-6x+45$

4. $4+7(x-5)$

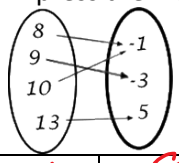
$7x-31$

5. Express the table as a relation.

x	-1	4	2	5
y	3	3	8	9

$\{(-1,3),(4,3),(2,8),(5,9)\}$

6. Express the mapping as a table. **Label your table!**



x	8	9	10	13
y	-1	-3	-1	5

7. Write the definition of a function: pairing of inputs with outputs such that each input has only one output

Pick two letter of the alphabet: one whose graph is and one whose graph is not a function when written in lowercase.

v a

For Problems 8-10, assume that $f(x)=x^2+1$ and $g(x)=3x$

8. $f(2)$

5

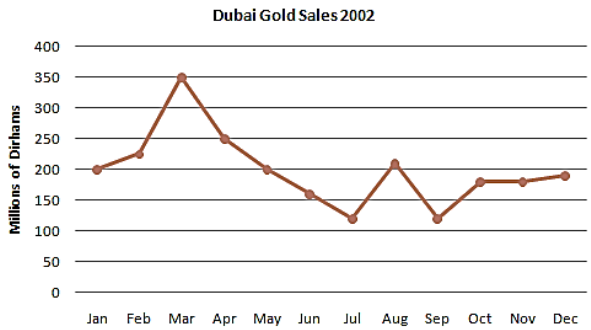
9. $f(-1)+g(4)$

14

10. $g(4a)$

12a

11. Use the graph shown and write 3 sentences describing Dubai's gold sales for the entire year of 2002.



The sales rose to $350 million by March and then began a steady decline to ~$120 million by July. Between July and August there was a rise to $200 million and then a decline back to ~$120 million by September. From September to October the sales rose to ~$180 million where it stayed fairly consistent throughout the rest of the year.

Solve each equation, if POSSILBE. SHOW ALL WORK

12. $-t + 9 = 24$

-15

13. $2\frac{1}{3}x = 9$

27/7

14. $3(x + 2) = 3x + 6$

infinite solutions

15. $2x - 6 = 9x + 8$

-2

16. $|x - 2| = 2$

x=0 x=4

17. $4|3x - 15| = -5$

no solution

Solve each proportion. SHOW ALL WORK.

18. $\frac{5}{a} = \frac{6}{18}$

15

19. $\frac{2}{x+3} = \frac{15}{60}$

x=5

20. $\frac{9x-3}{9} = \frac{5x+5}{3}$

-3=x

21. If a coat retails for $120 and Bob Wards marks it up to $165, what is the percent markup?

37.5%

22. Solve the following equation for y:

$-x + 3y = 5$

$y = \frac{5+x}{3}$ or $y = \frac{1}{3}x + \frac{5}{3}$

23. Solve the equation for k.

$\frac{k+b}{-15} = a$

K=-15a-b

24. A caterer knows that 18 heads of lettuce are needed to make dinner salads for 70 people. How many heads of lettuce are needed for a party of 175 people?

x=45 heads

25. What value of A would cause the following equation to have no solutions? Explain your answer!

$Ax + 5 = 2x - 9$

A=2