

Name: \_\_\_\_\_ Per: \_\_\_\_\_

Honors I – Chapters 1 & 2 Practice Test

**SHOW ALL YOUR WORK**

Evaluate or simplify each expression.

1. $\frac{3+7^2(5-2)}{5^2-10}$	2. $4 2x + 7  + 3x$ when $x = -2$	3. $(2x - 15)(-3)$	4. $7(x - 5) + 4$
--------------------------------	-----------------------------------	--------------------	-------------------

<p>5. Express the table as a relation of ordered pairs.</p> <table border="1" style="width: 100%; border-collapse: collapse; margin-bottom: 10px;"> <tr> <td style="width: 12.5%; padding: 2px;">x</td> <td style="width: 12.5%; padding: 2px;">-1</td> <td style="width: 12.5%; padding: 2px;">4</td> <td style="width: 12.5%; padding: 2px;">2</td> <td style="width: 12.5%; padding: 2px;">5</td> </tr> <tr> <td style="padding: 2px;">y</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">3</td> <td style="padding: 2px;">8</td> <td style="padding: 2px;">9</td> </tr> </table> <p>{ _____ }</p>	x	-1	4	2	5	y	3	3	8	9	<p>6. Express the mapping as a table. <b><u>Label your table!</u></b></p> <div style="text-align: center; margin-bottom: 10px;"> </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> </tr> <tr> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> <td style="width: 25%; height: 20px;"></td> </tr> </table>								
x	-1	4	2	5															
y	3	3	8	9															

7. Write the definition of a function:

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

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

8. $f(2)$	9. $f(-1) + g(4)$	10. $g(4a)$
-----------	-------------------	-------------

11. Use the graph shown and write 3 sentences describing Dubai's gold sales for the entire year of 2002. Describe max, min, when it was increasing or decreasing, etc.

**Dubai Gold Sales 2002**

Month	Sales (Millions of Dirhams)
Jan	200
Feb	225
Mar	350
Apr	250
May	200
Jun	160
Jul	120
Aug	210
Sep	120
Oct	180
Nov	180
Dec	190

Solve each equation, if **POSSIBLE**. **SHOW ALL WORK**

12. $-t + 9 = 24$	13. $2\frac{1}{3}x = 9$	14. $3(x + 2) = 3x + 6$	15. $2x - 6 = 9x + 8$
-------------------	-------------------------	-------------------------	-----------------------

16. $ x - 2  = 2$	17. $4 3x - 15  = -5$
-------------------	-----------------------

Solve each proportion. **SHOW ALL WORK.**

18. $\frac{5}{a} = \frac{6}{18}$	19. $\frac{2}{x+3} = \frac{15}{60}$	20. $\frac{9x-3}{9} = \frac{5x+5}{3}$
----------------------------------	-------------------------------------	---------------------------------------

21. If a coat retails for \$120 and Bob Wards marks it up to \$165, what is the percent markup?	22. Solve the following equation for y: $-x + 3y = 5$	23. Solve the equation for k. $\frac{k+b}{-15} = a$
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?	25. What value of $A$ would cause the following equation to have no solutions? Explain your answer! $Ax + 5 = 2x - 9$	