

Name _____
Date _____

Math 8 Period ____
HW # _____ Final Review HW

SHOW ALL WORK AND STEPS!

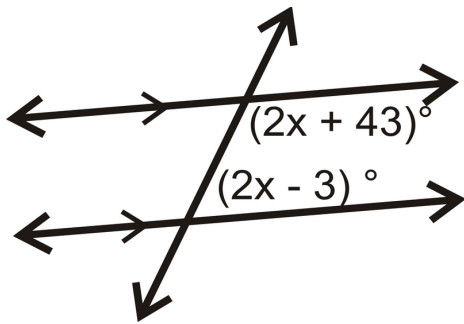
1) FACTOR: $(x^2 + 5x - 24)$	2) If $C = 5x^2 + 10x - 2$ and $D = -x^2 - x + 9$, determine the expression which represents $C - D$?										
3) Simplify: $(2y - 3)(y + 10)$	4) Simplify: $8(y + 6) + 2(-2y - 5)$										
5) Solve and graph: $-9x + 1 > -17$ $\leftarrow \text{-----} \rightarrow$	6) Solve and check: $2x + 8 = -5x - 20$ check										
7) If $x = -3$, find the value of: $5x^2 + 3x - 1$	8) There are about 7.21×10^7 dogs kept as pets in the United States. There are about 8.17×10^7 cats kept as pets in the United States. What is the combined number of dogs and cats? Give your answer in scientific notation?										
9) State the slope and y intercept in the equation $y + 9x = 10$.	10) Find the rate of change in the table shown below. <table border="1" data-bbox="824 1738 1490 1822"><tr><td>x</td><td>10</td><td>8</td><td>6</td><td>4</td></tr><tr><td>y</td><td>25</td><td>28</td><td>31</td><td>34</td></tr></table>	x	10	8	6	4	y	25	28	31	34
x	10	8	6	4							
y	25	28	31	34							

11) Solve and check the system of equations shown.

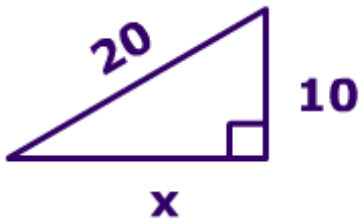
$$4x + 5y = 7 \quad -2x + 3y = -9$$

CHECK

12) Find the value of x in the diagram shown below.



13) Find the value of x . Round your answer to the *nearest tenth*. HINT: $a^2 + b^2 = c^2$



14) Solve and check:

$$4(2x + 3) = -3(x - 1) + 31$$

CHECK