Alg 1 Honors chapter 5 test review 2018 Name:_____

*** COMPLETE ALL PROBLEMS ON NOTEBOOK PAPER ***

Using the given information for each line, write the equation of each in slope-intercept form, and in standard form. Show all necessary work in a NEAT, organized manner. Circle each form of your equation.

1) through: $(3, 5)$, slope $= \frac{1}{2}$

2) through: $(3, 5)$, slope $= 2$

3) through: $(3, 1)$, slope $= 0$

4) through: $(0, 3)$ and $(-5, -5)$

5) through: $(-1, 3)$ and $(-1, -3)$

6) through: $(-3, -4)$ and $(-2, 4)$

7) through: $(2, -3)$, parallel to $y = -\frac{1}{2}x + 5$

8) through: $(1, 3)$, parallel to $x = 0$

9) through: $(3, -4)$, parallel to $4x + 2y = 10$

10) through: $(2, 4)$, parallel to $y = -5$

11) through: $(4, 4)$, perp. to $y = -\frac{4}{7}x + 3$

12) through: $(-2, -5)$, perp. to $y = 2$

13) through: $(-5, 5)$, perp. to $2y - x = 4$

14) through: $(0, 5)$, perp. to $y = -5$

Given the slope of a line and 2 points it passes through, find the missing value. Show all work. Circle your final answer.

15) $(-6, 7)$ and $(8, y)$; slope: $-\frac{4}{7}$

16) $(1, 2)$ and $(x, 4)$; slope: 2

17) $(x, -7)$ and $(9, 1)$; slope: $\frac{1}{2}$

Given $f(x) = -2x + 7$ *and* $g(x) = x^2 - 6$ find the following:

18.) $f(-5)$

19.) $f\left(\frac{1}{4}\right)$

20.) $f(x) = 3$

21.) $f(x) = -2$

21.) $g(-1)$

22.) $g\left(-\frac{1}{3}\right)$