Name: _____

Honors Math – Mixed Review Tasks

Task 1: Math Sudoku

	A	B	C	D	E	F	G	H	I
J									
K									
L									
M									
N									
O									
P									
Q									
R									

Directions: Complete each problem and show all work. No calculator allowed. Attach a separate sheet if necessary. Place answers in the appropriate boxes. Once you have completed the problems, use logic to fill in the remaining boxes in the Sudoku. Remember, each row, column, and 3x3 box will have each number between 1-9 exactly once.

AN: $-4(x+6) = -40$

AO: -4 – (-5)

BL: $(-2)^4 + (-2)^3 - 2^2 - 2^1$

BM: $\sqrt{22}$ rounded to the nearest whole number

BQ: Height of cylinder with radius 4 and volume 48π

BR: $-2x - 13 = -3x - 5$

CJ: $-9 = x - 14$

CK: $-0.04x + 1.32 = 1.04$

CQ: $-12 + 10(28 - 32) + 7 \cdot 8$

DM: $\frac{9}{2} + \frac{10}{3} + \frac{1}{6}$

DN: $7m - 3m - 6 = 6$

DO: Slope of $-12x + 3y = 18$

DQ: Hypotenuse of a right triangle with legs 3 and 4

DR: $\sqrt{6}$ rounded to the nearest whole number

EM: $4\left(\frac{1}{4} + x\right) = 5$

EO: $9x^0$

FJ: # of quadrants for a 270° turn

FK: Distance between (-4, 3) & (5, 3)

FM: $6 - 3(2k - 4) = -18$

FN: $\frac{2}{3} + \frac{3k}{4} = \frac{71}{12}$

FO: $\left(\frac{3}{2}\right)^2 - \frac{1}{4}$

GK: $\frac{11+22+33+44+55}{10+20+30+40+50+1+2+3+4+5}$

GQ: Other leg of a right triangle with one leg 15 and hypotenuse 17

GR: 10% of a right angle

HJ: $\sqrt[3]{64}$

HK: $\sqrt[4]{16}$

HO: $\frac{f}{5} - 4 = -3$

HP: y-intercept of: $6 - 2y = \frac{1}{3}x$

IM: $10 - (a - 1) = 8$

IN: $\frac{4}{6} = \frac{x}{9}$

Task 2: Friendly Transformations

Step 1: Graph the rectangle: (-10, -3), (-10, 0), (-9, 0), (-9, -3)

Step 2: Reflect across the x-axis.

Step 3: Reflect across the line x = - 6.

Step 4: Reflect across the x-axis.

Step 5: Reflect across the y-axis.

Step 6: Translate up 6 units.

Step 7: Rotate 90° counterclockwise.

Step 8: Translate by (x + 7, y – 5).

Step 9: Reflect across the line y = 3.

Step 10: Translate by (x – 10, y – 6).

Step 11: Rotate 90° clockwise.

Step 12: Reflect across the y-axis.

Step 13: Reflect across the line y = 6.

Step 14: Translate by (x – 7, y).

Step 15: Reflect across the line y = 6.

Step 16: Translate 12 units right and 6 units down.