A1. Find the slope of the line with equation $6x - 2y = 3.$.

A2. Let k be the number you receive. Find the sum of the positive integer factors of $2k$, including 1 and $2k$.

A3. Let k be the number you receive. Find the y coordinate of the point of intersection of the lines with equations $x + 3y = 6k$ and $x - y = 2k$.

A4. Let k be the number you receive. Lines from the center of a regular polygon to the vertices divide the polygon into k congruent triangles. What number is the degree measure of the smallest angle of each triangle?

A5. Let k be the number you receive. Find the largest solution of the equation $x^2 - 7x = k$.

B1. Find the degree of the polynomial $\left(\frac{1}{2}x-2\right)^2 \cdot (2x+3)^4$.

B2. Let k be the number you receive. What negative number satisfies the equation $x^2 - kx = 16$?

B3. Let k be the number you receive. How many positive prime numbers are less than $10-k$? (Remember that 1 is NOT a prime.)

B4. Let k be the number you receive. Find the slope of the line with equation $3x + ky = k^2$.

B5. Let k be the number you receive. Find $\frac{3k-1}{k+1}$.

C1. Find the positive integer k such that $(k + 1)^2$ and k^2 differ by 13.

C2. Let k be the number you receive. Find the radius of the circle with circumference πk.

C3. Let k be the number you receive. Find the real root of $x^3 - 9k = 0$.

C4. Let k be the number you receive. Find the area of the right triangle with legs of lengths k and 6 and hypotenuse $\sqrt{36 + k^2}$.

C5. Let k be the number you receive. Find the number of distinct positive integer factors of k^2.

D1. Find the solution of the equation $\frac{2^{x-1}}{8} = 4$.

D2. Let k be the number you receive. Find the solution of the equation $\frac{5x+3}{x-1} = k$.

D3. Let k and h be the numbers you receive. If k and h are the roots of the polynomial $x^2 + bx + c$, find b.

D4. Let h be the number you receive. Find the x-intercept of the line with equation $6x + 2y = h^2$.

D5. Find the smallest positive number *k* that has four different positive factors: 1, *k*, and two other integers.