1A: \( x^\alpha, 2 \cdot y^\beta, 3^l, 2^k \cdot z^\gamma \)

\( x = 5, \ y = 7, \ z = 11: \) \( 3^l - 1 = 2 \cdot 7^\beta \) yields \( 2 \cdot (3^l - 1 + \ldots + 1) = 2 \cdot 7^\beta \) and \( 3^l - 1 + \ldots + 1 = 7^\beta, \) so \( l \) must be odd. With \( l \) odd, \( 2^k \cdot 11^\gamma = 3^l + 1 = 4 \cdot (3^l - 3^{l-2} + \ldots + 1); \) since the second factor is odd, we conclude that \( k = 2. \) But in that case \( 5^\alpha - 1 = 2^k \cdot 11^\gamma - 4 = 4 \cdot (11^\gamma - 1) = 4 \cdot 10 \cdot (11^\gamma - 1 + \ldots + 1) \) would be divisible by \( 5, \) contradiction.

\( x = 5, \ y = 11, \ z = 7: \) \( 5^\alpha - 1 = 2 \cdot 11^\beta - 2 = 2 \cdot (11^\beta - 1) = 2 \cdot 10 \cdot (11^\beta - 1 + \ldots + 1) \) is divisible by \( 5, \) contradiction.

\( x = 7, \ y = 5, \ z = 11: \) \( 3^l - 1 = 2 \cdot 5^\beta \) yields \( 2 \cdot (3^l - 1 + \ldots + 1) = 2 \cdot 5^\beta \) and \( 3^l - 1 + \ldots + 1 = 5^\beta, \) so \( l \) must be odd. Arguing as in the case \( z = 11 \) case above, we conclude that \( k = 2 \) and that \( 2 \cdot 5^\beta - 2 = 2^k \cdot 11^\gamma - 4 \) is divisible by \( 5, \) contradiction.

\( x = 7, \ y = 11, \ z = 5: \) \( 2^k \cdot 5^\gamma - 4 = 2 \cdot 11^\beta - 2 = 2 \cdot (11^\beta - 1) = 2 \cdot 10 \cdot (11^\beta - 1 + \ldots + 1) \) is divisible by \( 5, \) contradiction.

\( x = 11, \ y = 5, \ z = 7: \) \( 2^k \cdot 5^\gamma - 4 = 2 \cdot 11^\beta - 2 = 11^\alpha - 1 = 10 \cdot (11^\alpha - 1 + \ldots + 1) \) is divisible by \( 5, \) contradiction.

\( x = 11, \ y = 7, \ z = 5: \) \( 2^k \cdot 5^\gamma - 4 = 11^\alpha - 1 = 10 \cdot (11^\alpha - 1 + \ldots + 1) \) is divisible by \( 5, \) contradiction.