5B: $2^k \cdot 3^l$, x^α, $2 \cdot y^\beta$, $3 \cdot z^\gamma$

x = 5, y = 7, z = 11: $2^k \cdot 3^l = 3 \cdot 11^\gamma - 3 = 3 \cdot (11^\gamma - 1) = 3 \cdot 10 \cdot (11^{\gamma-1} + \ldots + 1)$ is divisible by 5, contradiction.

x = 5, y = 11, z = 7: $2^k \cdot 3^l = 2 \cdot 11^\beta - 2 = 2 \cdot (11^\beta - 1) = 2 \cdot 10 \cdot (11^{\beta-1} + \ldots + 1)$ is divisible by 5, contradiction.

x = 7, y = 5, z = 11: as in case z = 11 above.

x = 7, y = 11, z = 5: as in case y = 11 above.

x = 11, y = 5, z = 7: $2^k \cdot 3^l = 11^\alpha - 1 = 10 \cdot (11^{\alpha-1} + \ldots + 1)$ is divisible by 5, contradiction.

x = 11, y = 7, z = 5: as in case x = 11 above.