10. [11 points] After traveling back to present day, Kiki has given up on building time travel machines, but she is still building size-change machines and testing them out on her math notebooks each weighing 1kg. She has three machines with settings ranging from 1 to 100 (including non-whole number settings). On a setting of 8, each of the three machines changes the mass of a notebook to 5kg.

a. [3 points] On a setting of 38, the first machine changes the mass of the notebook to 3.5kg. Find a formula for $L(n)$, the mass of a notebook after being transformed by the first machine on a setting of n, if $L(n)$ is a **linear** function.

$L(n) =$_____

b. [4 points] On a setting of 10, the second machine changes the mass of the notebook to $\frac{20}{9}$kg. Find a formula for $E(n)$, the mass of a notebook after being transformed by the second machine on a setting of n, if $E(n)$ is an **exponential** function.

$E(n) =$_____

c. [4 points] On a setting of 64, the third machine changes the mass of the notebook to $\frac{5}{4}$kg. Find a formula for $W(n)$, the mass of a notebook after being transformed by the third machine on a setting of n, if $W(n)$ is a **power** function.

$W(n) =$_____

