Let X and Y be i.i.d. random variables whose probability density functions $f_X(u)$ and $f_Y(u)$ equal e^{-u} when $u > 0$, and equal zero when $u \leq 0$. Define two new random variables $W = X + 3$ and $Z = Y + 4$. What is the probability that $W + 2Z$ is less than 11?

(a) 0

(b) $1/2$

(c) $1/e$

(d) $1/e^2$

(e) $e/(1+e)$

(f) 1

(g) $1 - (1/e)$

(h) $1/(2e)$

(i) $1/7$

(j) $1/11$

(k) $7/11$

(l) None of these