

Unitat 6. La Distribució Normal. SOLUCIONS

1. (a) $k = 64.75$,
(b) $k = 118.45$,
(c) $k = 130.15$,
(d) $k' = 98.2$, $k = 101.8$.
2. (a) $\mu = 64.1$,
(d) $\sigma = 2.82$.
3. (a) $P(X \leq 120) = 0.959$, $P(90 \leq X \leq 120) = 0.937$, $P(106 \leq X \leq 110) = 0.1914$,
 $P(X \geq 121) = 0.030$.
(b) $x_0 = 100.64$.
4. $P(X \leq 6/X \geq 5) = 0.954$.
5. 0.9395.
6. 0.859.
7. 746.
8. $P(X \geq 445) = 0.9997$
9. (a) $E(X) = 30$,
(b) $P(X < 25) = 0.1814$,
(c) $P(25 < X < 35) = 0.6372$.
10. $x_0 = 36.65 \approx 37$