**Self-assessment answers: 24 Continuous distributions**

**1.** Let volume of coffee (ml) dispensed be *V*. Then *V* ~ N(150, 25).

(a) P(*V* < 142) = 0.0548 (3SF) (from GDC)

(b) P(*V* > *a*) = 0.2 ⇒ *a* = 154.2 *[5 marks]*

**2.** (a) 





(b) P(*X* < 0.3) = 

 or 0.391 *[5 marks]*

**3.**

**4.**