**CHAPTER** **6, FORM A**

**1.** **(a)** *P*(0) = 0.038; *P*(1) = 0.300; *P*(2) = 0.263; *P*(3) = 0.171; *P*(4) = 0.117; *P*(5) = 0.058;

*P*(6) = 0.033; *P*(7) = 0.021

**(b)**



 **(c)** *P*(2 ≤ *x* ≤ 5) = 0.609

 **(d)** *P*(*x* < 3) = 0.601

 **(e)** *μ* = 2.44

 **(f)** *σ* = 1.828

 **(f)** σ = 1.574

**2.** *P*(4) = 0.122

**3.** **(a)** *P*(11) = 0.0088

 **(b)** *P*(*r* ≥ 9) = 0.200

 **(c)** *P*(*r* ≤ 3) = 0.012

 **(d)** *P*(9 ≤ *r* ≤ 11) = 0.200

**4.** 6

**5.** **(a)**



 **(b)** *μ* = 3.75

 **(c)** σ = 0.968

**6.** **(a)** *µ* = 1.05

 **(b)** σ = 0.945

 **(c)** Yes, since 4 >*µ* + 2.5*σ* =

1.05 + (2.5)(0.945) = 3.4125.