**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.