1. $M = (200+800)/2 = 500 \quad D = 600^2/12 = 30000$

2. $0.2 = \frac{(0.5-x)^2}{12} \Rightarrow 0.5-x = \sqrt{2.4} \Rightarrow x = 0.5 - \sqrt{2.4}$

3. $M = 2 \quad D = 16 \quad std = 4$

4. $M = 174$
   $std = 8$
   а) $z = 1 \quad p = 0.8413$
   б) $z = 2 \quad p = 0.9772$
   в) $z_1 = -1 \quad p_1 = 0.1587 \quad p = 0.9772 - 0.1587 = 0.8185$
   г) $p = 0.8413 - 0.1587 = 0.6826$
   д) $z_1 = -2 \quad p_1 = 0.0228 \quad p = 0.9772 - 0.0228 = 0.9544$
   е) $z_1 = -3 \quad p_1 = 0.0013 \quad p_2 = 1 - 0.9772 \quad p = 0.0241$
   ё) $z_2 = 3 \quad p_2 = 1 - 0.9987 \quad p = 0.0013 + 0.0013 = 0.0026$
   ж) $z = -1 \quad p = 0.1587$

5. $M = 178 \quad D = 25 \quad \sigma = 5$

$$z = \frac{190-178}{5} = 2.4$$