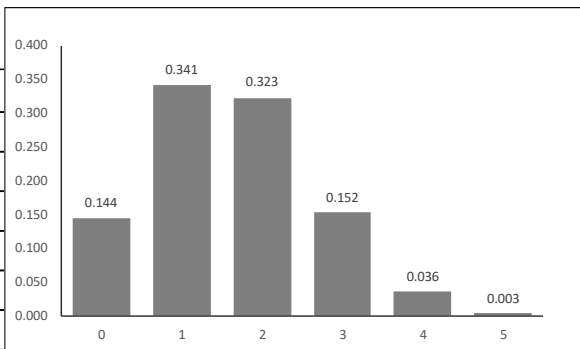
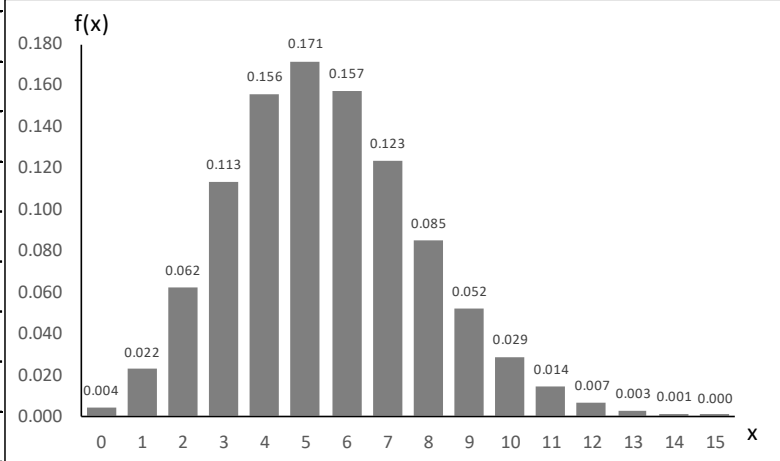


1.	(1)	$\Pr(x) = {}_5C_x(0.321)^x(1 - 0.321)^{5-x}$																																						
	(2)	① $E(x) = n\pi = 5 \times 0.321 = 1.61$																																						
		② $Var(x) = n\pi(1 - \pi) = 5 \times 0.321 \times 0.679 = 1.09$																																						
	(3)	<table><tr><th>x</th><th><math>nC_x</math></th><th><math>p^x</math></th><th><math>(1-p)^{n-x}</math></th><th><math>f(x)</math></th></tr><tr><td>0</td><td>1</td><td>1.000</td><td>0.144</td><td>0.144</td></tr><tr><td>1</td><td>5</td><td>0.321</td><td>0.213</td><td>0.341</td></tr><tr><td>2</td><td>10</td><td>0.103</td><td>0.313</td><td>0.323</td></tr><tr><td>3</td><td>10</td><td>0.033</td><td>0.461</td><td>0.152</td></tr><tr><td>4</td><td>5</td><td>0.011</td><td>0.679</td><td>0.036</td></tr><tr><td>5</td><td>1</td><td>0.003</td><td>1.000</td><td>0.003</td></tr></table> 					x	$nC_x$	$p^x$	$(1-p)^{n-x}$	$f(x)$	0	1	1.000	0.144	0.144	1	5	0.321	0.213	0.341	2	10	0.103	0.313	0.323	3	10	0.033	0.461	0.152	4	5	0.011	0.679	0.036	5	1	0.003	1.000
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2.	(1)	① $E(x) = n\pi = 2750 \times \frac{1}{500} = 5.5$																																						
		② $Var(x) = n\pi = 5.5$																																						
	(2)	$\Pr(x) = \frac{5.5^x e^{-5.5}}{x!}$																																						
	(3)	<table><tr><th>x</th><th><math>f(x)</math></th></tr><tr><td>0</td><td>0.004</td></tr><tr><td>1</td><td>0.022</td></tr><tr><td>2</td><td>0.062</td></tr><tr><td>3</td><td>0.113</td></tr><tr><td>4</td><td>0.156</td></tr><tr><td>5</td><td>0.171</td></tr><tr><td>6</td><td>0.157</td></tr><tr><td>7</td><td>0.123</td></tr><tr><td>8</td><td>0.085</td></tr><tr><td>9</td><td>0.052</td></tr><tr><td>10</td><td>0.029</td></tr><tr><td>11</td><td>0.014</td></tr><tr><td>12</td><td>0.007</td></tr><tr><td>13</td><td>0.003</td></tr><tr><td>14</td><td>0.001</td></tr><tr><td>15</td><td>0.000</td></tr></table> 					x	$f(x)$	0	0.004	1	0.022	2	0.062	3	0.113	4	0.156	5	0.171	6	0.157	7	0.123	8	0.085	9	0.052	10	0.029	11	0.014	12	0.007	13	0.003	14	0.001	15	0.000
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3.	(1)	$\Pr(x \geq 80) = \Pr\left(z \geq \frac{80 - 65}{9}\right) = \Pr(z \geq 1.67) = 0.04746 \therefore 4.7\%$
	(2)	$\Pr(x < 45) = \Pr\left(z < \frac{45 - 65}{9}\right) = \Pr(z < -2.22) = 0.01321 \therefore 1.3\%$
	(3)	$z_{\alpha} = 1.29 = \frac{x - 65}{9}$ $\therefore x = 76.61 \therefore 77 \text{ 点}$
	(4)	$z_{\alpha} = -1.65 = \frac{x - 65}{9}$ $\therefore x = 50.15 \therefore 50 \text{ 点}$
4.	(1)	① $\bar{x} = \frac{\sum x_i}{n} = 58.9$
		② $S_x^2 = \frac{\sum (x_i - \bar{x})}{n} = 196.19$
	(2)	$58.9 - 1.96 \times \sqrt{\frac{196.19}{20}} < \mu_x < 58.9 + 1.96 \times \sqrt{\frac{196.19}{20}}$ $52.76126 < \mu_x < 65.03874$ <p>下限 : 52.8 万円 上限 : 65.0 万円</p>
	(3)	<p>① <math>\widehat{\sigma}_x^2 = \frac{\sum (x_i - \bar{x})^2}{n-1} = \frac{3923.8}{19} = 206.5158</math></p> <p>②</p> $58.9 - 2.093 \times \sqrt{\frac{206.5158}{20}} < \mu_x < 58.9 + 2.093 \times \sqrt{\frac{206.5158}{20}}$ $52.1744 < \mu_x < 65.6256$ <p>下限 : 52.2 万円 上限 : 65.6 万円</p>