

1. $p = .80$ $n = 200$

$P(\text{EXACTLY } 150)$

CALC



$$\text{NORMALCDF}(149.5, 150.5, 200(.80), \sqrt{200(.8)(1-.8)})$$

$$= 0.0148$$

BY HAND

① $np(1-p) \geq 10$
 $200(.8)(1-.8) \geq 10$
 $32 \geq 10 \checkmark$

$n = 200$ $p = .80$

②

$x = 149.5$

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$$z = \frac{x - np}{\sqrt{np(1-p)}}$$

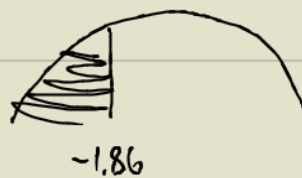
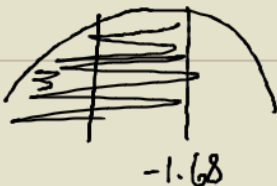
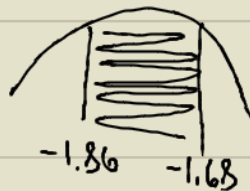
$$z = \frac{x - np}{\sqrt{np(1-p)}}$$

$$z = \frac{149.5 - 200(.8)}{\sqrt{200(.8)(1-.8)}}$$

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$z = -1.86$

$z = -1.68$



$.0465$

$.0314$

$.0151$