

Step 3

Info:

- Machines produce 5% defective gadgets
- Widgets are packed in crates of 1900 each
- $\mu = 95 \rightarrow 1900 \cdot 0.05 = 95$
average defective widgets = 95
- $\text{pr}(\text{defective widgets} \geq 115)?$ } Question

Probab. l. by d
of defective
widget

$B = \text{Defective widget}$

$$\text{pr}(B) = \binom{1900}{B} 0.05^B (0.05)^{1900-B}$$

$$\text{pr}(B) = \frac{1900!}{B! (1900-B)!} \cdot 0.05^B \cdot (0.05)^{1900-B}$$

$$\sum_{B=115}^{1900} \text{pr}(B)$$

} This is what we
are trying to answer