

6.38

$$0.05 = \text{pr}(u > 140)$$

$$= \text{pr}\left(z > \frac{140 - 15n}{2\sqrt{n}}\right)$$

$$\Rightarrow \frac{140 - 15n}{2\sqrt{n}} = 1.645$$

$$\Rightarrow 15n + 3.29\sqrt{n} - 140 = 0$$

$$\Rightarrow \sqrt{n} = \frac{-3.29 \pm \sqrt{3.29^2 - 4 \cdot 15 \cdot (-140)}}{30}$$

$$\Rightarrow n = 8.69$$

So, n should be no bigger than 8