If all three components must function for the product to function then the product's overall reliability is approximately

- a. 0.95
- b. 0.92
- c. 0.90
- **d.** 0.77

(Medium)

58. A product consists of three components arranged as follows:



If all three components must function for the product to function then the product's overall reliability is approximately



If all three components must function for the product to function, and the product's overall reliability must be at least 0.90, then the reliability of the first component, R_1 , must be

- a. at least 0.7750
- b. at least 0.90
- c. at least 0.95
- d. at least 0.972

(Hard)

67. The overall reliability of the following system is



68. The overall reliability of the following system is



69. A company produces a product consisting of two components arranged as follows:



Both components must function for the product to function. To achieve an overall reliability of at least 0.91 without changing the reliability of the 1^{st} component, the reliability of the 2^{nd} component, R_2 , would need to be

- a. at least 0.93
- b. at least 0.91
- c. at least 0.955
- d. at least 0.98

```
(Medium)
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