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## 1. INDICACIONES

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Se utilizó los siguientes parámetros:

- $m \in \{-50, -49, -48, -47, -46, -45, -44, -43, -42, -41, -40, -39, -38, -37, -36, -35, -34, -33, -32, -31, -30, -29, -28, -27, -26, -25, -24, -23, -22, -21, -20, -19, -18, -17, -16, -15, -14, -13, -12, -11, -10, -9, -8, -7, -6, -5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50\}$
- $u \in \{0,1, 0,2, 0,3, 0,4, 0,5, 0,6, 0,7, 0,8, 0,9, 1,0, 1,1, 1,2, 1,3, 1,4, 1,5, 1,6, 1,7, 1,8, 1,9, 2,0, 2,1, 2,2, 2,3, 2,4, 2,5, 2,6, 2,7, 2,8, 2,9, 3,0, 3,1, 3,2, 3,3, 3,4, 3,5, 3,6, 3,7, 3,8, 3,9, 4,0, 4,1, 4,2, 4,3, 4,4, 4,5, 4,6, 4,7, 4,8, 4,9, 5,0, 5,1, 5,2, 5,3, 5,4, 5,5, 5,6, 5,7, 5,8, 5,9, 6,0, 6,1, 6,2, 6,3, 6,4, 6,5, 6,6, 6,7, 6,8, 6,9, 7,0, 7,1, 7,2, 7,3, 7,4, 7,5, 7,6, 7,7, 7,8, 7,9, 8,0, 8,1, 8,2, 8,3, 8,4, 8,5, 8,6, 8,7, 8,8, 8,9, 9,0, 9,1, 9,2, 9,3, 9,4, 9,5, 9,6, 9,7, 9,8, 9,9\}$
- $unaD \in \{\text{True}, \text{False}\}$

En total, se plantean 25 preguntas.

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## 2. BANCO DE PREGUNTAS

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### 2.1 Normal

#### 1. Normal - 1

Sea  $X \sim N(-20, 2,25)$ . Calcule  $P(-19,93 \leq X \leq -17,21)$ .

- $0.4499 \pm 0.001 \checkmark$

#### 2. Normal - 2

Sea  $X \sim N(-30, 7,29)$ . Calcule  $P(X \geq -30,1)$ .

- $0.5148 \pm 0.001 \checkmark$

#### 3. Normal - 3

Sea  $X \sim N(25, 0,04)$ . Calcule  $P(24,72 \leq X \leq 24,81)$ .

- $0.0903 \pm 0.001 \checkmark$

#### 4. Normal - 4

Sea  $X \sim N(5, 21,16)$ . Calcule  $P(2,4 \leq X \leq 12,5)$ .

- $0.6625 \pm 0.001 \checkmark$

#### 5. Normal - 5

Sea  $X \sim N(-10, 0,04)$ . Calcule  $P(-10,27 \leq X \leq -9,91)$ .

- $0.5851 \pm 0.001 \checkmark$

#### 6. Normal - 6

Sea  $X \sim N(-17, 0,25)$ . Calcule  $P(-16,84 \leq X \leq -16,37)$ .

- $0.2706 \pm 0.001 \checkmark$

**7. Normal - 7**

Sea  $X \sim N(31, 17,64)$ . Calcule  $P(X \leq 31,02)$ .

- $0.5019 \pm 0.001$  ✓

**8. Normal - 8**

Sea  $X \sim N(32, 9,0)$ . Calcule  $P(X \leq 37,28)$ .

- $0.9608 \pm 0.001$  ✓

**9. Normal - 9**

Sea  $X \sim N(-20, 8,41)$ . Calcule  $P(-17,44 \leq X \leq -14,66)$ .

- $0.1559 \pm 0.001$  ✓

**10. Normal - 10**

Sea  $X \sim N(30, 1,21)$ . Calcule  $P(X \geq 30,09)$ .

- $0.4674 \pm 0.001$  ✓

**11. Normal - 11**

Sea  $X \sim N(-1, 4,0)$ . Calcule  $P(-4,59 \leq X \leq -3,89)$ .

- $0.0379 \pm 0.001$  ✓

**12. Normal - 12**

Sea  $X \sim N(26, 9,61)$ . Calcule  $P(31,41 \leq X \leq 32,19)$ .

- $0.0176 \pm 0.001$  ✓

**13. Normal - 13**

Sea  $X \sim N(-6, 1,44)$ . Calcule  $P(X \leq -6,22)$ .

- $0.4273 \pm 0.001$  ✓

**14. Normal - 14**

Sea  $X \sim N(-18, 15,21)$ . Calcule  $P(-23,86 \leq X \leq -18,25)$ .

- $0.408 \pm 0.001$  ✓

**15. Normal - 15**

Sea  $X \sim N(-8, 4,84)$ . Calcule  $P(X \geq -9,95)$ .

- $0.8123 \pm 0.001$  ✓

**16. Normal - 16**

Sea  $X \sim N(-31, 12,96)$ . Calcule  $P(-33,3 \leq X \leq -29,3)$ .

- $0.4202 \pm 0.001$  ✓

**17. Normal - 17**

Sea  $X \sim N(4, 1,44)$ . Calcule  $P(0,45 \leq X \leq 5,86)$ .

- $0.9379 \pm 0.001$  ✓

**18. Normal - 18**

Sea  $X \sim N(37, 2,25)$ . Calcule  $P(X \leq 39,46)$ .

- $0.9495 \pm 0.001$  ✓

**19. Normal - 19**

Sea  $X \sim N(-21, 0,64)$ . Calcule  $P(X \leq -21,48)$ .

- $0.2743 \pm 0.001$  ✓

**20. Normal - 20**

Sea  $X \sim N(-11, 1,21)$ . Calcule  $P(X \geq -13,45)$ .

- $0.987 \pm 0.001$  ✓

**21. Normal - 21**

Sea  $X \sim N(-22, 1,69)$ . Calcule  $P(-23,28 \leq X \leq -23,09)$ .

- $0.0385 \pm 0.001$  ✓

**22. Normal - 22**

Sea  $X \sim N(-11, 11,56)$ . Calcule  $P(-8,73 \leq X \leq -2,58)$ .

- $0.2455 \pm 0.001$  ✓

**23. Normal - 23**

Sea  $X \sim N(-17, 5,76)$ . Calcule  $P(X \geq -14,14)$ .

- $0.1167 \pm 0.001$  ✓

**24. Normal - 24**

Sea  $X \sim N(11, 0,36)$ . Calcule  $P(X \geq 10,72)$ .

- $0.6796 \pm 0.001$  ✓

**25. Normal - 25**

Sea  $X \sim N(46, 1,21)$ . Calcule  $P(48,03 \leq X \leq 48,58)$ .

- $0.023 \pm 0.001$  ✓