

1. Determine Each of the following.

$$P(z < 1.03)$$

$$P(z < 2.34)$$

$$P(-3.05 < z < -1.78)$$

$$P(z < 2.67)$$

$$P(z > 2.35)$$

$$P(1.57 < z < 2.68)$$

$$P(z < 0.08)$$

$$P(z > 3.57)$$

$$P(1.02 < z < 2.34)$$

$$P(z < -0.67)$$

$$P(z > 0.97)$$

$$P(-2.56 < z < -1.32)$$

2. Determine the z-score that has the given percentage of values below it. Use of appropriate notation is expected.

(a) 92%

(e) 72%

(i) 22%

(b) 58%

(f) 9%

(j) 12.5%

(c) 10%

(g) 98%

(k) 28.4%

(d) 4%

(h) 96%

(l) 4.8%

3. Determine the z-score that has the given percentage of values above it. Use of appropriate notation is expected.

(a) 92%

(e) 58%

(i) 4%

(b) 78%

(f) 76%

(j) 12.5%

(c) 25%

(g) 37%

(k) 98%

(d) 13%

(h) 42%

(l) 4.8%

4. For the Standard Normal Distribution, determine the percentage of z-scores between 2.18 and 3.02.

5. For the Standard Normal Distribution, determine the percentage of z-scores greater than 3.

6. For the Standard Normal Distribution, determine the percentage of z-scores between -1.93 and 0.13 .

7. For the Standard Normal Distribution, determine the percentage of z-scores less than 3.14.

8. For the Standard Normal Distribution, determine the percentage of z-scores less than 2.96.

9. For the Standard Normal Distribution, determine the percentage of z-scores greater than -1.19 .

10. For the Standard Normal Distribution, determine the percentage of z-scores less than 2.81.

11. Determine the z-score for which 94.06% of values in the Standard Normal Distribution are below.

12. Determine the z-score for which 85.08% of values in the Standard Normal Distribution are below.

13. Determine the z-score for which 3.01% of values in the Standard Normal Distribution are to the right.

14. Determine the z-score for which 25% of values in the Standard Normal Distribution are greater.

15. For the Standard Normal Distribution, determine the interval that contains the middle 10% of the z-scores.

16. For the Standard Normal Distribution, determine the interval that contains the middle 50% of the z-scores.

17. For the Standard Normal Distribution, determine the interval that contains the middle 90% of the z-scores.

18. For the Standard Normal Distribution, determine the interval that contains the middle 95% of the z-scores.

19. For the Standard Normal Distribution, determine the interval that contains the middle 96% of the z-scores.

20. For the Standard Normal Distribution, determine the interval that contains the middle 98% of the z-scores.