

For 1–5, describe the location of the point z along the horizontal axis of a standard normal distribution in terms of standard deviations from the mean.

1. $z = -2$

2. $z = -1.5$

3. $z = 2.33$

4. $z = -1.99$

5. $z = 3.05$

For 6–15, find the indicated probabilities for the standard normal random variable X with mean $\mu = 0$ and standard deviation $\sigma = 1$.

6. $P(-1 < Z < 1)$

7. $P(-2 < Z < 2)$

8. $P(-3 < Z < 3)$

9. $P(Z > 0)$

10. $P(Z < 1)$

11. $P(1 < Z < 2)$

12. $P(0 < Z < 2)$

13. $P(-1 < Z < 2)$

14. $P(Z > 3)$

15. $P(Z < -1)$