Prob/StatDiscrete   **Name**_____
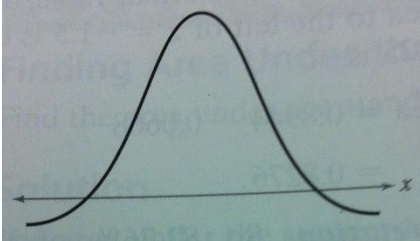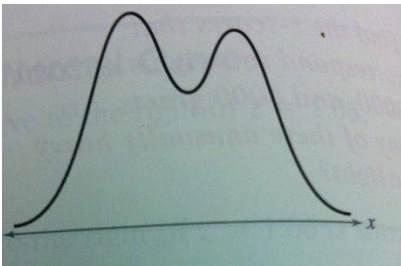**Worksheet 6.1**

1. What is the total area under the normal curve?
2. What is the mean of the standard normal distribution? What is the standard deviation of the standard normal distribution?

Graphical Analysis *In Exercises 3-6, determine whether the graph could represent a variable with a normal distribution. Explain your reasoning*
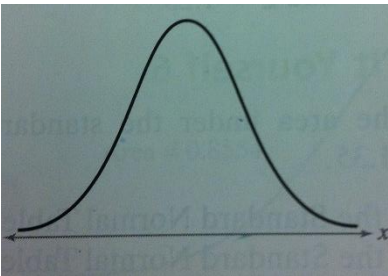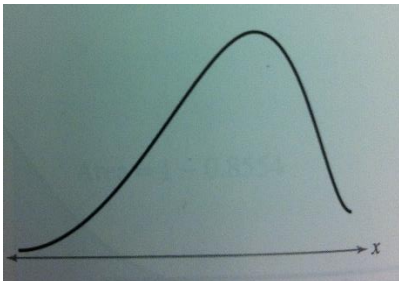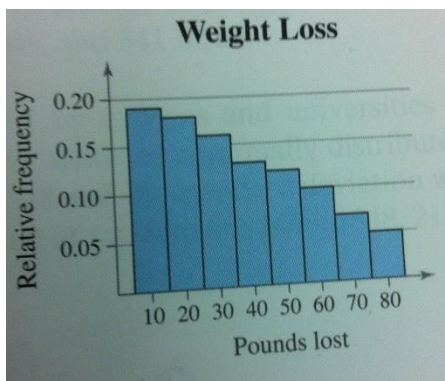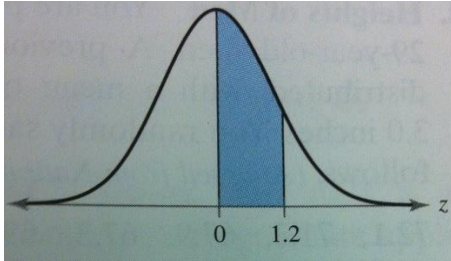
3.

4.

5.

6.

Graphical Analysis *In Exercise 7, determine whether the histogram represents data with a normal distribution. Explain your reasoning.*
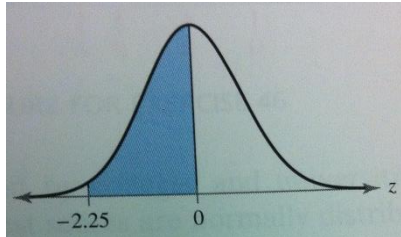
7.

Graphical Analysis *In Exercises 8-11, find the area of the indicated region under the standard normal curve. If convenient, use technology to find the area.*
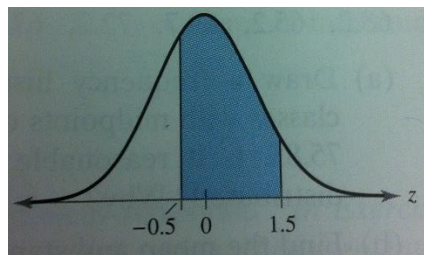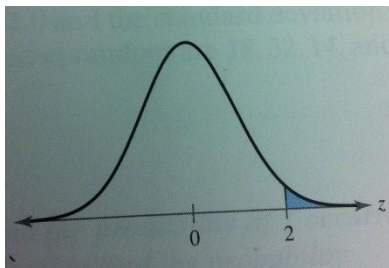
8.

9.

10.

11.

Finding Area *In Exercises 12-19, find the indicated area under the standard normal curve. If convenient, use technology to find the area.*

12. To the left of $z = 0.08$
13. To the left of $z = 1.28$
14. To the right of $z = -1.95$
15. To the right of $z = 3.25$
16. To the left of $z = -3.16$
17. To the right of $z = 2.51$
18. Between $z = 0$ and $z = 2.86$
19. Between $z = -0.51$ and $z = 0$

Finding Probabilities *In Exercises 20-22, find the indicated probability using the standard normal distribution. If convenient, use technology to find the probability.*

20. $P(z > -0.95)$
21. $P(z > -1.85)$
22. $P(-0.89 < z < 0)$