

## 4-54.

In each of these, we could also notice that we only get responses from those who agree to participate in our polling activities-already a very unrepresentative sample.
a. Not likely; this samples the population of people with phone numbers listed online that are home midday.
b. Not likely; this samples the population of people who shop at that particular grocery store.
c. Not likely; this samples the population of people who attend movies.
d. Not likely; this samples the population of people who go downtown at the time you are there.
e. This sample is likely to be more representative, as it is closer to random.

## 4-55.



4-56.
a. $x=4$
b. $x=9$

4-57.
$\sin 5^{\circ}=\frac{d}{100} ; d \approx 87.2$ yards

4-58.
a.

b.

c. Each function is neither odd nor even.

## 4-59.

a. not a function

D: $-3 \leq x \leq 3$
$\mathrm{R}:-3 \leq y \leq 3$
b. function

D: $-2 \leq x \leq 3$
R: $-2 \leq y \leq 2$

4-60.
a.

b.


