$\qquad$

### 9.2 Practice A

In Exercises 1-3, find the value of $x$. Write your answer in simplest form.
1.

2.

3.


In Exercises 4-6, find the values of $x$ and $y$. Write your answers in simplest form.
4.

5.

6.


In Exercises 7 and 8, find the area of the figure. Round decimal answers to the nearest tenth.
7.

8.

9. A 12 -foot ladder is leaning up against a wall, as shown. How high does the ladder reach up the wall when $x$ is $30^{\circ}$ ? $45^{\circ}$ ? $60^{\circ}$ ? Round decimal answers to the nearest tenth, if necessary.

$\qquad$

### 9.2 Practice B

In Exercises 1 and 2, copy and complete the table. Write your answers in simplest form.

2.


| $\boldsymbol{x}$ | 5 |  | $\sqrt{2}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| $\boldsymbol{y}$ |  | $4 \sqrt{2}$ |  | 24 |


| $\boldsymbol{a}$ | 11 |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| $\boldsymbol{b}$ |  | 9 |  | $5 \sqrt{3}$ |
| $\boldsymbol{c}$ |  |  | 16 |  |

3. The side lengths of a triangle are given. Determine whether each triangle is a $45^{\circ}-45^{\circ}-90^{\circ}$ triangle, a $30^{\circ}-60^{\circ}-90^{\circ}$ triangle, or neither.
a. $5,10,5 \sqrt{3}$
b. $7,7,7 \sqrt{3}$
c. $6,6,6 \sqrt{2}$

In Exercises 4-6, find the values of the variables. Write your answers in simplest form.
4.

5.

6.

7. You build a two-person tent, as shown. How many square feet of material is needed to make the tent, assuming the tent has a floor?


