Practice 5-5
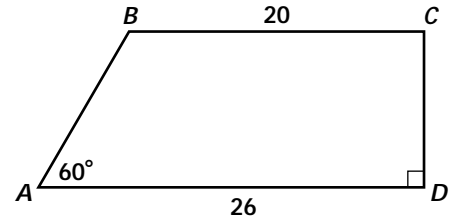•••
Mixed Exercises

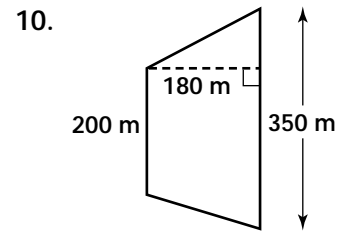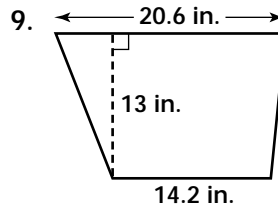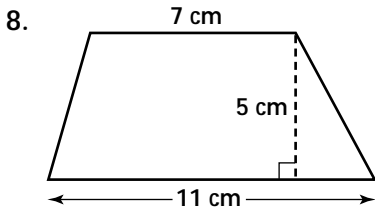In trapezoid *ABCD*, $m\angle A = 60$, $m\angle D = 90$, $BC = 20$, and $AD = 26$.
Complete.

1. $m\angle C = $ _____?_____

2. $m\angle B = $ _____?_____

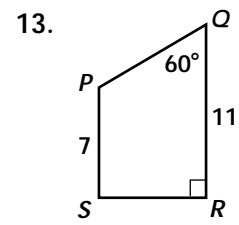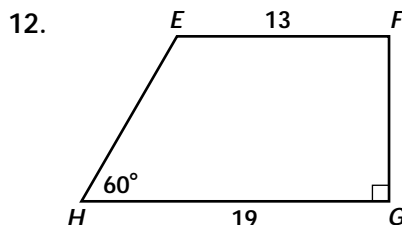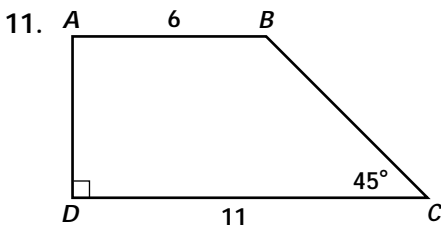Draw the altitude $\overline{BE}$ to $\overline{AD}$, with point *E* on $\overline{AD}$. Complete.

3. $m\angle ABE = $ _____?_____

4. $m\angle BEA = $ _____?_____

5. $BE = $ _____?_____

6. $CD = $ _____?_____

7. The area of *ABCD* is _____?_____

Find the area of each trapezoid. Round your answer to the nearest whole
number.

8.

9.

10.

Find the area of each trapezoid. Leave your answer in simplest radical
form.

11.

12.

13.

Find the area of each trapezoid given the height *h* and the bases b_1 and b_2.
Round your answers to the nearest tenth.

14. $h = 3$
    $b_1 = 4.2$
    $b_2 = 4.8$

15. $h = 3.6$
    $b_1 = 1.6$
    $b_2 = 2.2$

16. $h = 1.06$
    $b_1 = 0.75$
    $b_2 = 1.5$

Use trapezoid *WXYZ* for Exercises 17 and 18.

17. **Writing** How do you know that $\angle W$ is a right angle?

18. **Writing** Explain how to find the length of $\overline{WZ}$.