12. The table on page 311 lists 0.5000 as the value of sin 30°. This value is exact. Explain why.
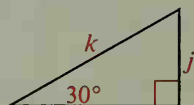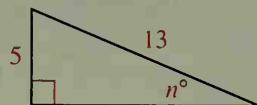
13. Suppose $\sin n° = \dfrac{5}{13}$. Find $\cos n°$ and $\tan n°$ without using a table or calculator.

14. According to the table on page 311, sin 1° and tan 1° are both approximately 0.0175. Which is actually larger? How do you know?

15. a. Using the definition of sine, explain why the sine of an acute angle is always less than one.
   b. Is the cosine of an acute angle always less than one?

Written Exercises

In these exercises, use a scientific calculator or the table on page 311. Find lengths correct to the nearest integer and angles to the nearest degree.

In Exercises 1–12 find the values of the variables.

A **1.**

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