Chapter 1

# Extra Practice

**Lesson 1-1** **Find the next two terms in each sequence.**

**1.** 12, 17, 22, 27, 32, . . .

**2.** 1, 1.1, 1.11, 1.111, 1.1111, . . .

**3.** 5000, 1000, 200, 40, . . .

**4.** 1, 12, 123, 1234, . . .

**5.** 3, 0.3, 0.03, 0.003, . . .

**6.** 1, 4, 9, 16, 25, . . .

**Lessons 1-2 and 1-3** **Write *true* or *false*.**

**7.** $A, D, F$ are coplanar.

**8.** $\overleftrightarrow{AC}$ and $\overleftrightarrow{FE}$ are coplanar.

**9.** $A, B, E$ are coplanar.

**10.** $D, A, B, E$ are coplanar.

**11.** $\overleftrightarrow{FC} \parallel \overleftrightarrow{EF}$

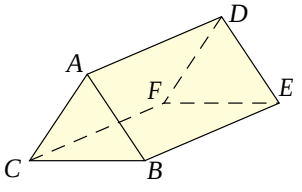
**12.** plane $ABC \parallel$ plane $FDE$

**13.** $\overleftrightarrow{BC}$ and $\overleftrightarrow{DF}$ are skew lines.

**14.** $\overleftrightarrow{AD}$ and $\overleftrightarrow{EB}$ are skew lines.

**15.** $\overleftrightarrow{DE} \parallel \overleftrightarrow{CF}$

**16.** $D, E,$ and $B$ are collinear.




**Lessons 1-4 and 1-5** **Use the figure at the right for Exercises 17–22.**

**17.** If $BC = 12$ and $CE = 15$, then $BE =$ ■.

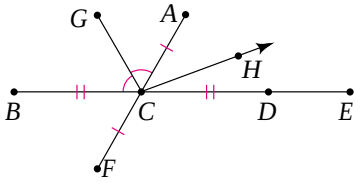
**18.** ■ is the angle bisector of ■.

**19.** **Algebra** $BC = 3x + 2$ and $CD = 5x - 10$. Solve for $x$.

**20.** **Algebra** If $AC = 5x - 16$ and $CF = 2x - 4$, then $AF =$ ■.

**21.** $m\angle BCG = 60$, $m\angle GCA =$ ■, and $m\angle BCA =$ ■.

**22.** $m\angle ACD = 60$ and $m\angle DCH = 20$. Find $m\angle HCA$.



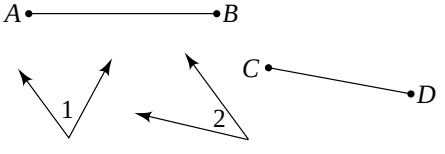

**Lesson 1-5** **Make a diagram larger than the given one. Then do the construction.**

**23.** Construct the perpendicular bisector of $\overline{AB}$.

**24.** Construct $\angle A$ so that $m\angle A = m\angle 1 + m\angle 2$.

**25.** Construct the angle bisector of $\angle 1$.

**26.** Construct $\overline{FG}$ so that $FG = AB + CD$.




**Lesson 1-6** **(a) Find the distance between the points to the nearest tenth.**
**(b) Find the coordinates of the midpoint of the segments with the given endpoints.**

**27.** $A(2, 1), B(3, 0)$

**28.** $R(5, 2), S(-2, 4)$

**29.** $Q(-7, -4), T(6, 10)$

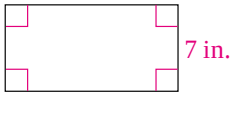
**30.** $C(-8, -1), D(-5, -11)$

**31.** $J(0, -5), N(3, 4)$

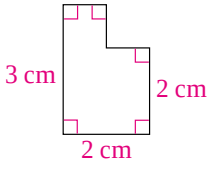
**32.** $Y(-2, 8), Z(3, -5)$

**Lesson 1-7** **Find the perimeter (or circumference) and area of each figure.**

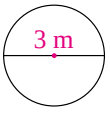
**33.**




**34.**




**35.**




**36.**