Practice Test Chapter 1

Multiple Choice
Identify the choice that best completes the statement or answers the question.

Refer to Figure 1.
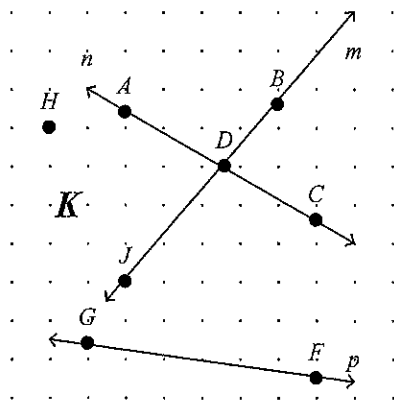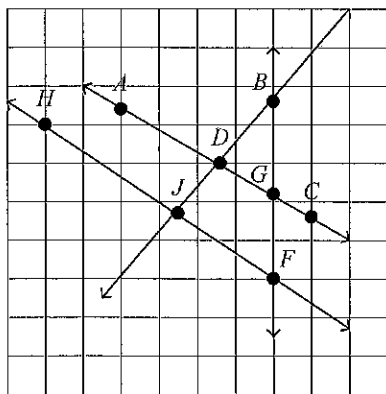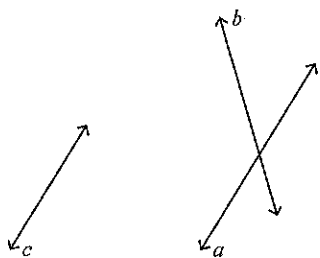

Figure 1

_____ 1. Name the plane containing lines *m* and *p*.

a. *n*	c. *H*
b. *GFC*	d. *JDB*

_____ 2. Name three points that are collinear.

a. *H, J, D*	c. *A, D, B*
b. *A, D, C*	d. *F, G, D*

_____ 3. Lines *a*, *b*, and *c* are coplanar. Lines *a* and *b* intersect. Line *c* intersects only with line *b*. Draw and label a figure for this relationship.

a.
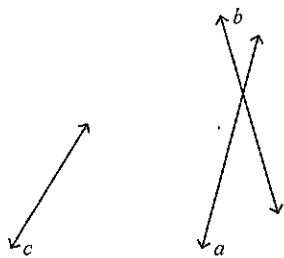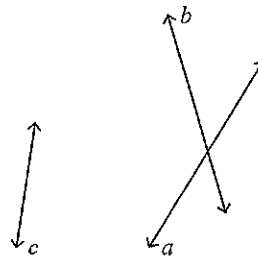

c.
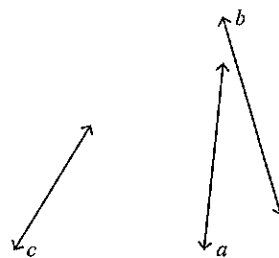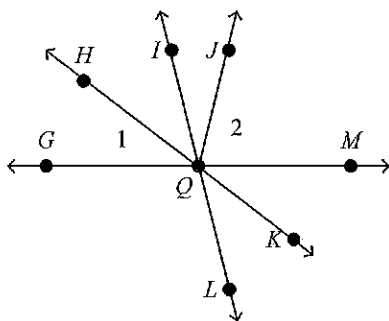

b.

d.

Use the figure to find the angles.

_____ 4. Name two acute vertical angles.
    a. $\angle KQL$, $\angle KQM$ c. $\angle GQI$, $\angle IQM$
    b. $\angle KQL$, $\angle IQH$ d. $\angle HQL$, $\angle IQK$

_____ 5. Name a linear pair.
    a. $\angle KQG$, $\angle HQM$ c. $\angle GQI$, $\angle IQM$
    b. $\angle GQL$, $\angle LQJ$ d. $\angle LQG$, $\angle KQM$

6. Name an angle supplementary to $\angle MQI$.
   a. $\angle IQG$ c. $\angle MQK$
   b. $\angle GQL$ d. $\angle IQH$

Short Answer

Refer to Figure 1.

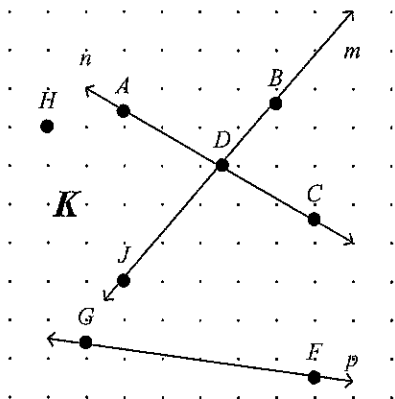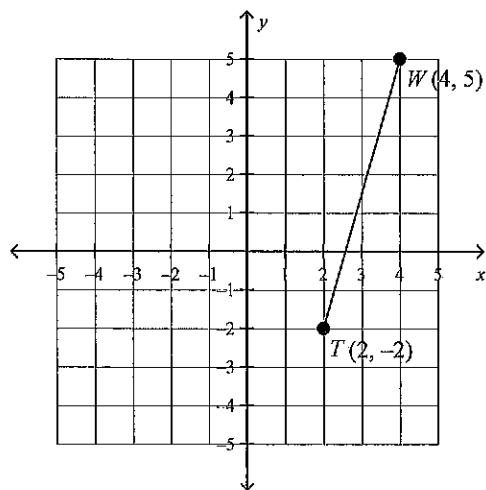

Figure 1

7. Name a point NOT contained in lines m, n, or p.

8. Name the intersection of lines m and n.

9. Find the value of the variable and LN if M is between L and N.
   $LM = 4a$, $MN = 12a$, $LM = 48$

Use the Distance Formula to find the distance between each pair of points.
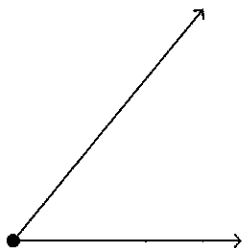
10.

3

Find the coordinates of the midpoint of a segment having the given endpoints.

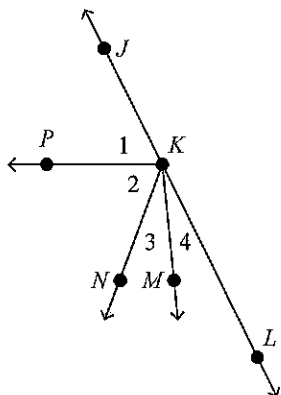11. $Q(-6, 4), R(-8, 4)$

Measure the angle.

12.

13. If $m\angle FGK = 4v - 2$ and $m\angle KGH = 2v + 6$, find x.

In the figure, $\overrightarrow{KJ}$ and $\overrightarrow{KL}$ are opposite rays. $\angle 1 \cong \angle 2$ and $\overrightarrow{KM}$ bisects $\angle NKL$.

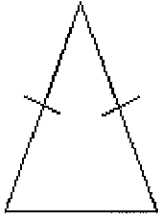14. If $\angle JKN$ is a right angle and $m\angle 1 = 4t + 5$, what is t?

15. If $m\angle JKN = 8x + 2$ and $m\angle MKL = 3x + 5$, what is $m\angle MKN$?

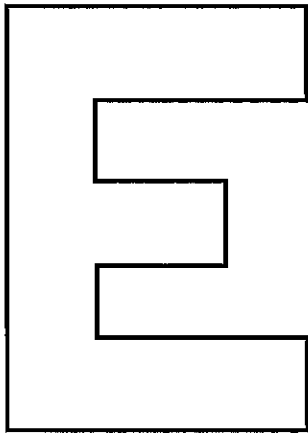16. If $\angle JKN$ is a right angle and $m\angle 4 = 2(3x + 6)$, what is x?

17. The measures of two complementary angles are $12q - 9$ and $8q + 14$. Find the measures of the angles.

Name each polygon by its number of sides. Then classify it as convex *or* concave *and* regular *or* irregular.
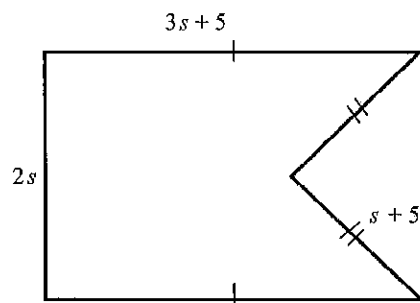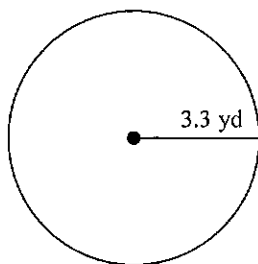
18.

19.

Find the length of each side of the polygon for the given perimeter.

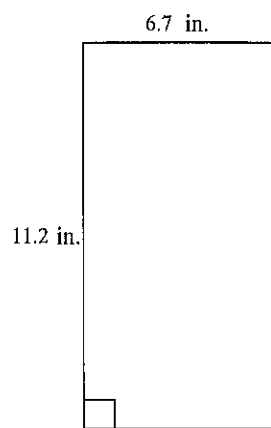20. $P = 100$ ft. Find the length of each side.
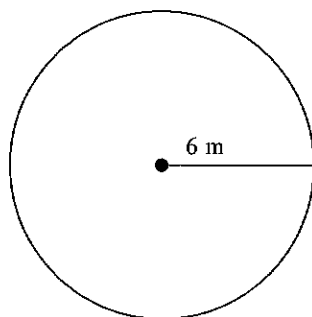
Find the circumference of the figure.

21.

3.3 yd

Find the area of the figure.
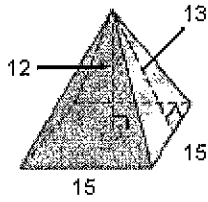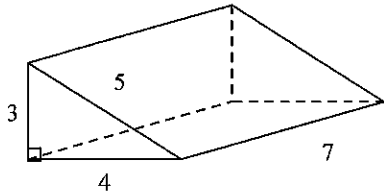
22.

6.7 in.

11.2 in.

23.

6 m

Find the surface area of the solid.

24.

Find the volume of the solid.

25.

26. The coordinates of midpoint M and endpoint C of a segment are $M(25.5, 60.1)$ and $C(18.3, 72.5)$. Find the coordinates of the other endpoint.

Practice Test Chapter 1
Answer Section

MULTIPLE CHOICE

1. B
2. B
3. A
4. B
5. C
6. A

SHORT ANSWER

7. H
8. D
9. $a = 12, LN = 192$
10. $\sqrt{53}$
11. $(-7, 4)$
12. 50
13. 14
14. 10
15. 41
16. 5.5
17. 42, 48
18. triangle, convex, irregular
19. dodecagon, concave, irregular
20. 29 ft, 29 ft, 13 ft, 13 ft, 16 ft
21. about 20.7 yd
22. 75.04 in^2
23. 36π m^2
24. 615 units^2
25. 42 unit^3
26. $(32.7, 47.7)$

The midpoint of a segment is the point halfway between the endpoints of the segment.
The coordinates of the midpoint of a segment with endpoints that have the coordinates (x_1, y_1) and (x_2, y_2)
are $\left(\dfrac{x_1 + x_2}{2}, \dfrac{y_1 + y_2}{2} \right)$.