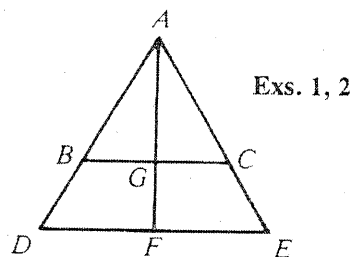


### CHAPTER I REVIEW WORKSHEET

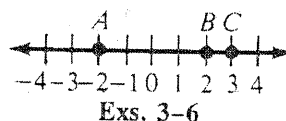
Remember to organize and show all of your work.



1. Name three collinear points. *ex*  $\overline{AB, D}$
2. Name three coplanar points that are noncollinear.

*ex*  $\overline{A, B, C}$

3. Name the coordinate of point A. *-2*
4. Name the coordinate of the midpoint of  $\overline{AC}$ . *.5*

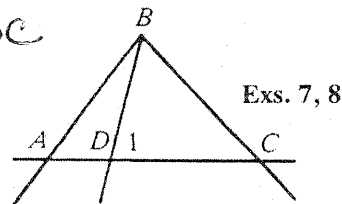


5. Complete:  $AB + BC = \underline{?} \overline{AC} = 5$

6. Name a ray opposite to  $\overrightarrow{BC}$ .  $\overrightarrow{BA}$

7. Name a pair of adjacent angles. *4*,  $\angle ADB / \angle ABD, \angle DBC$

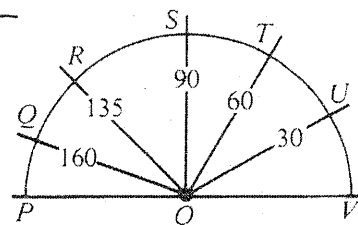
8. Name the sides of  $\angle 1$ .  $\overline{BD}, \overline{DC}$



9. Name the vertex of  $\angle ROS$ . *pt. O*
10. Name a right angle.  $\angle SOV$  or  $\angle POS$

11. Name the postulate that justifies the following statement:  
 $m\angle ROS + m\angle SOU = m\angle ROU$ . *Angle Add Post*

12. Find the measure of  $\angle SOU$ . *60*



Complete.

13. If  $\overline{BD}$  bisects  $\angle ABC$ , then  $\underline{41} = \underline{42}$ .

14. If  $\overline{BD}$  bisects  $\angle ABC$  and  $m\angle 1 = 45$ , then  $m\angle 2 = \underline{45}$ .

15. If  $\overline{BD}$  bisects  $\angle ABC$ ,  $m\angle 1 = 4x + 8$ , and  $m\angle 2 = 7x - 1$ , then  $x = \underline{3}$ .

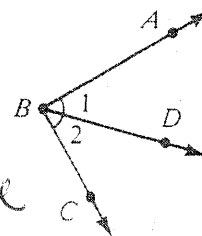
$$4x + 8 = 7x - 1$$

$$9 = 3x$$

$$3 = x$$

Classify each statement as true or false.

16. Any three points lie in exactly one plane. *False*
17. A line and a point not on that line lie in more than one plane. *False*
18. The intersection of two lines is exactly one point. *True*
19. The intersection of two planes is exactly one point. *False*
20. The length of  $\overline{AB}$  is denoted by  $AB$ . *True*
21. If an angle appears to be a  $90^\circ$  angle, then you can conclude it is a right angle. *False*
22. If a point  $C$  is between points  $A$  and  $B$ , then  $C$  must lie on  $\overline{AB}$ . *True*



**CHAPTER 2 REVIEW WORKSHEET**

Remember to organize and show all of your work.

hyp:  $\angle A$  is a rt.  $\angle$   
 concl:  $m\angle A = 90$

1. Write the hypothesis and the conclusion of the conditional statement:

If  $\angle A$  is a right angle, then  $m\angle A = 90$ .

2. Write the converse of the following statement:

If  $x < 0$ , then  $x^2 > 0$ . **If  $x^2 > 0$ , then  $x < 0$**

3. Justify each statement with a property from algebra.

a. If  $2x = 7$ , then  $7 = 2x$ . **Symmetric Prop**

b. If  $-3y + x = 12$  and  $x = 2y$ , then  $-3y + 2y = 12$ . **substitution**

4.  $\vec{YK}$  is the bisector of  $\angle XYZ$ ,  $\vec{YD}$  is the bisector of  $\angle KYZ$ , and  $m\angle XYZ = 144$ . Find  $m\angle KYD$ . **36**

5. Name a pair of complementary angles.  **$\angle DPE, \angle CPE$**

6. Name two perpendicular rays.  **$\vec{PB} \perp \vec{PC}$**

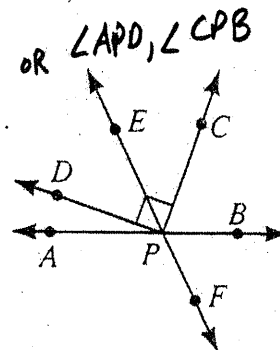
7. Name a pair of adjacent supplementary angles.  **$\angle APD, \angle DPB$**

8.  $\vec{PE}$  bisects  $\angle DPC$ . Find  $m\angle EPC$ . **45**

9. Complete:  $m\angle APD + m\angle BPC = ?$  **90**

10. Name a pair of vertical angles.  **$\angle APE \perp \angle FPB$**

**OR  $\angle APF \perp \angle EPB$**



Exs. 5-10

Complete.

11. If  $M$  is the midpoint of  $\overline{PL}$ , then  $PM = ?$   **$\frac{1}{2}PL$  or  $ML$**

12. If  $\angle A$  and  $\angle B$  are complementary and  $m\angle A = 47$ , then  $m\angle B = ?$  **43**

13. If  $\angle 1$  and  $\angle 2$  are vertical angles, then  $\angle 1 ? \angle 2$ .  **$\cong$**

14. If two lines form congruent adjacent angles, then the lines are **?**  **$\perp$**

15. Supplements of congruent angles are **?**  **$\cong$**

Classify each statement as true or false.

16. Perpendicular lines form right angles. **True**

17. Adjacent angles must be complementary. **False**

18. Two segments are congruent if and only if their lengths are equal. **True**

19. Theorems that have already been proved can be used as reasons in proofs. **True**

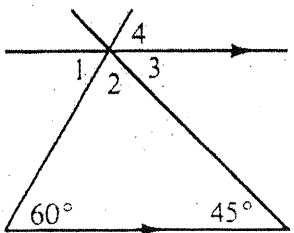
**CHAPTER 3 REVIEW WORKSHEET**

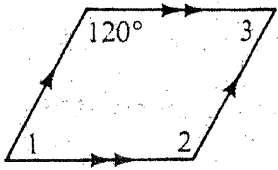
Remember to organize and show all of your work.

Complete each statement with the word *always*, *sometimes*, or *never*.

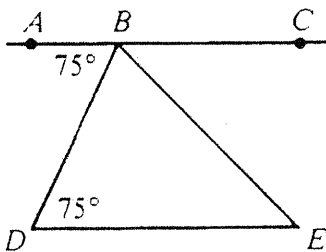
1. Two lines that do not intersect are ? parallel. *Sometimes*
2. Two lines parallel to the same plane ? intersect. *Sometimes*
3. Through a point not on a line, one can ? draw a line parallel to the line. *Always*
4. An acute triangle is ? a right triangle. *Never*
5. Two lines parallel to a third line are ? parallel to each other. *Always*
6. If two lines are cut by a transversal, then corresponding angles are ? congruent. *Sometimes*
7. Two lines perpendicular to the same line are ? parallel. *Sometimes*

Find the measures of the numbered angles in the diagrams shown.

8.   $m\angle 1 = 60$   
 $m\angle 2 = 75$   
 $m\angle 3 = 45$   
 $m\angle 4 = 60$

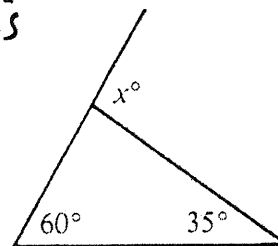
9.   $m\angle 1 = 60$   
 $m\angle 2 = 120$   
 $m\angle 3 = 60$

10. Explain why  $\overleftrightarrow{AC}$  and  $\overleftrightarrow{DE}$  must be parallel.



If alt. int.  $\angle$ s are  $\cong$ , then  $\parallel$  lines

11. Find the value of  $x$ .



95

12. A polygon has 7 sides. Find the sum of the measures of the interior angles. *900*

13. A regular polygon has 15 sides. Find the measure of each exterior angle. *24*

14. Use inductive reasoning to predict the next two numbers in each sequence.

a. 1, 6, 10, 13, ...

b.  $\frac{1}{4}$ , 1, 4, 16, ...

*15, 16*

*64, 256*

### CHAPTER 4 REVIEW WORKSHEET

Remember to organize and show all of your work.

Complete.

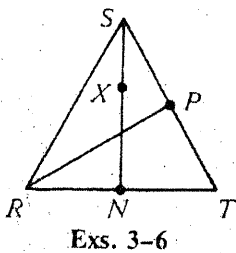
1. If  $\triangle TAR \cong \triangle DEW$ , then  $\angle A \cong \angle E$ ,  $\overline{RT} \cong \overline{WD}$ , and  $\triangle ART \cong \triangle EWD$ .

2. If  $\overline{PA} \cong \overline{AT}$ , then  $\triangle PAT$  is a(n) isos. triangle.

3. If  $\overline{SP} \cong \overline{PT}$ , then  $\overline{RP}$  is a(n) median of  $\triangle RST$ .

4. If  $m\angle RPS = 90$ , then  $\overline{RP}$  is a(n) altitude of  $\triangle RST$ .

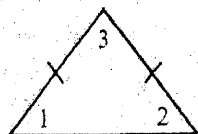
5. If  $X$  is equidistant from the sides of  $\angle RST$ , then  $\overline{SX}$  is the bisector of  $\angle RST$ .



6. If  $\overline{SN}$  is a perpendicular bisector of  $\overline{RT}$ , then  $X$  is equidistant from R and T.

7. If  $m\angle 1 = 50$ , find the measures of  $\angle 2$  and  $\angle 3$ .

$m\angle 2 = 50$   
 $m\angle 3 = 80$



Can the triangles be proved congruent? If so, by which method, SSS, SAS, ASA, AAS, or HL?

8. SAS

9. SSS

10. AAS

11. NO

12. ASA

13. HL

little  $\triangle$ 's: AAS