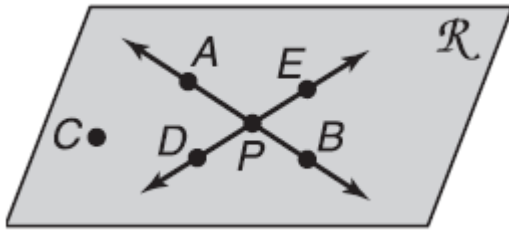
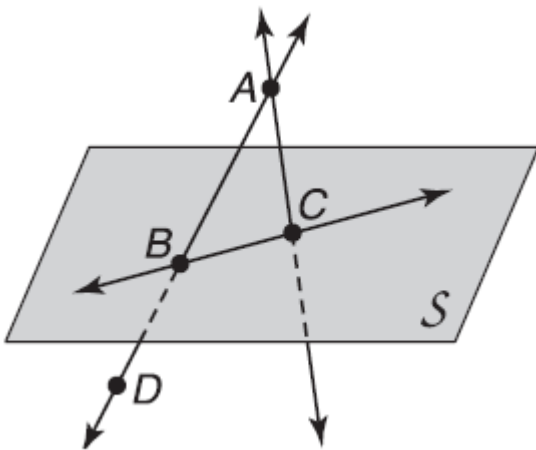


Refer the following figure for problems 1 - 5.



- 1) Name a point that is collinear with points  $D$  and  $P$ . 1) \_\_\_\_\_
- 2) Name a point that is noncollinear with points  $A$  and  $B$ . 2) \_\_\_\_\_
- 3) What is another name for plane  $R$ ? 3) \_\_\_\_\_
- 4) What is another name for  $\overleftrightarrow{BP}$ ? 4) \_\_\_\_\_
- 5) What is the intersection of  $\overleftrightarrow{AB}$  and  $\overleftrightarrow{DE}$ ? 5) \_\_\_\_\_

Refer the following figure for problems 6 - 9.



- 6) What is the intersection of plane  $S$  and  $\overleftrightarrow{BC}$ ? 6) \_\_\_\_\_
- 7) What is the intersection of plane  $S$  and  $\overleftrightarrow{AD}$ ? 7) \_\_\_\_\_
- 8) Name three points that are coplanar. 8) \_\_\_\_\_
- 9) Are points  $A$ ,  $B$ , and  $C$  coplanar? 9) \_\_\_\_\_

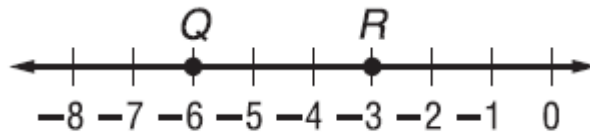
Use the following information for numbers 10 and 11.

Point  $G$  is between points  $H$  and  $K$ ,  $HG = x + 2$ ,  $GK = 4x$ , and  $HK = 8x - 7$

10) Find the value of  $x$ . 10) \_\_\_\_\_

11) Find the length of  $HK$ . 11) \_\_\_\_\_

Use the number line for problems 12 & 13.



12) Find the midpoint of  $\overline{QR}$  12) \_\_\_\_\_

13) Find the measure of  $QR$ . 13) \_\_\_\_\_

Use the points  $A(2,2)$  and  $B(7,4)$  for problems 14 & 15.

14) Find the coordinates of the midpoint of  $AB$ . 14) \_\_\_\_\_

15) Find the distance between  $A$  and  $B$ . *Answers can be left in radical form or a decimal rounded to the nearest tenth place.* 15) \_\_\_\_\_

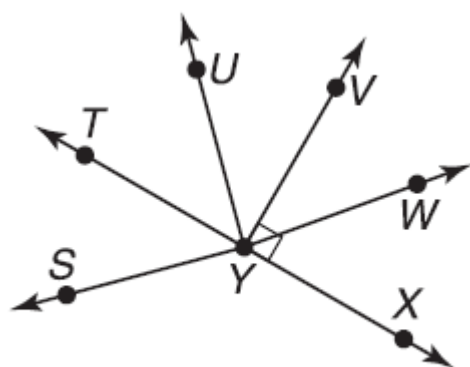
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16)  $Y(-2,2)$  is the midpoint of  $\overline{XZ}$ . If  $Z$  has coordinates  $(2, 8)$ , find the coordinates for  $X$ . 16) \_\_\_\_\_

Determine whether each statement is true or false.

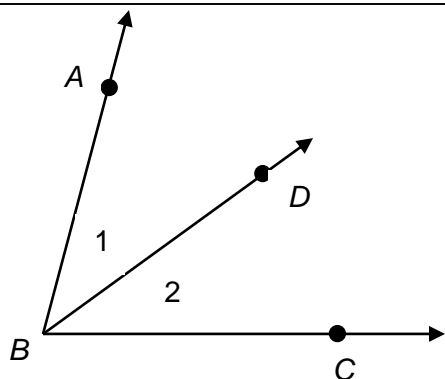
- 17) Any three points are coplanar. 17) \_\_\_\_\_
- 18) An acute angle has no complement. 18) \_\_\_\_\_
- 19) All adjacent angles are congruent. 19) \_\_\_\_\_
- 20) All vertical angles are congruent. 20) \_\_\_\_\_
- 21) If  $D$  is between  $M$  and  $T$ , then  $MD = DT + MT$ . 21) \_\_\_\_\_

Refer to the following figure for problems 22 – 30.



- 22) Name a pair of vertical angles. 22) \_\_\_\_\_
- 23) Name the angle that is complementary to  $\angle VYW$ . 23) \_\_\_\_\_
- 24) Name a right angle. 24) \_\_\_\_\_
- 25) Name a linear pair. 25) \_\_\_\_\_
- 26) Is  $\overline{VY} \perp \overline{TX}$ ? 26) \_\_\_\_\_
- 27) Name the sides of  $\angle SYT$ . 27) \_\_\_\_\_
- 28) Name the vertex of  $\angle TYW$ . 28) \_\_\_\_\_
- 29) Name a pair of opposite rays. 29) \_\_\_\_\_
- 30) If  $m\angle VYW = 4x + 8$ ,  $m\angle WYX = 6x + 2$ , find the value of  $x$ . 30) \_\_\_\_\_

Refer to the following figure for problems 31 – 34.



- 31) Find the value of  $x$  if  $m\angle ABC = 7x$ ,  $m\angle 1 = 2x + 5$ , &  $m\angle 2 = 3x - 1$ .

31) \_\_\_\_\_

- 32) If  $\overrightarrow{BD}$  bisects  $\angle ABC$ ,  $m\angle ABD = 5x - 10$  &  $m\angle DBC = 3x + 8$ , find  $m\angle ABC$ .

32) \_\_\_\_\_

- 33) If  $\angle ABC$  is a right angle, then what type of angle is  $\angle ABD$ ?

33) \_\_\_\_\_

- 34) If  $\angle ABC$  is a right angle and  $\overrightarrow{BD}$  bisects  $\angle ABC$ , what is  $m\angle ABD$ ?

34) \_\_\_\_\_

- 
- 35) Find the measures of two supplementary angles if the measure of one angle is five times its supplement.

35) \_\_\_\_\_