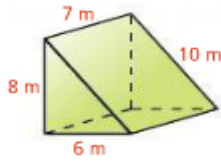


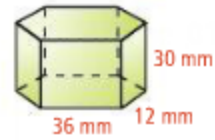
Chapter 1 Test Review

1. Draw a net for the following figures:

A.



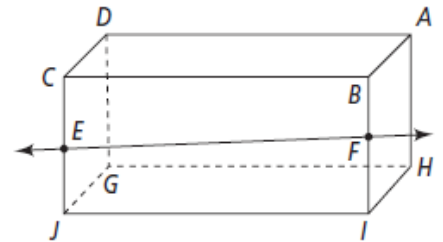
B.



Numbers 2 and 4, refer to the diagram.

2. Which of the following planes intersect?

- a. Planes ADC and GHI
- b. Planes ABC and ABI
- c. Planes CBF and ADG
- d. Planes CBI and DAH



3. Which of the following planes is parallel to the plane that contains \overleftrightarrow{EF}

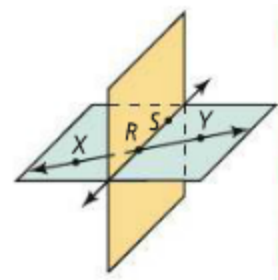
- A. Plane AGH
- B. Plane BDF
- C. Plane ADE
- D. Plane CBH

4. How many planes that are shown are perpendicular to the front face of the rectangular prism?

- A. 0
- B. 1
- C. 4
- D. 5

For numbers 5-7, refer to the diagram on the right.

- 5. What are the two other names for \overleftrightarrow{XY} ?
- 6. What are the opposite rays?
- 7. What is the intersection of the two planes?



8. If $DM = 37$, find the value of r .

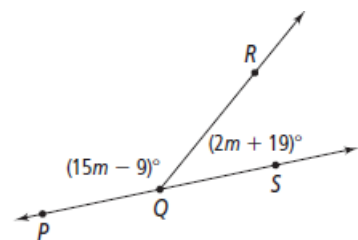


On numbers 9 and 10, refer to the diagram below

9. What is $m\angle PQR$?

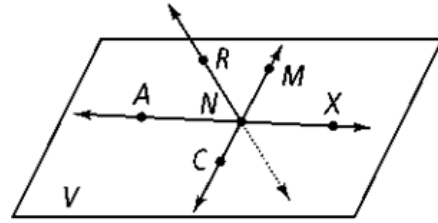
10. Assume point T is collinear with Q and R and Q lies between T and R.

- Which angle would be congruent to $\angle PQT$?
- A. $\angle PQR$
- B. $\angle RQS$
- C. $\angle PQS$
- D. none of the above

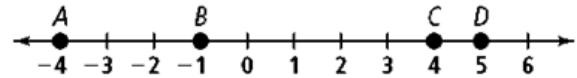


Numbers 11-15, refer to the diagram below.

11. What is the intersection of \overleftrightarrow{CN} and \overleftrightarrow{RN} ?
12. What are two other ways to name plane V ?
13. Name 3 collinear points.
14. Are R , N , M , and X coplanar?
15. Name the pair of opposite rays with endpoint N .

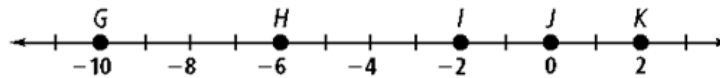


On numbers 16-21, use the following diagram to find the length of each segment.



16. \overline{AB}
17. \overline{BC}
18. \overline{AC}
19. \overline{AD}
20. \overline{BD}
21. \overline{CD}

22. Use the following diagram to determine if the following segments are congruent.



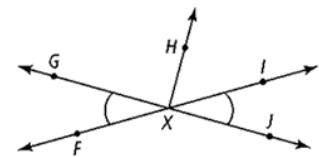
a. \overline{GI} and \overline{HI}

b. \overline{GH} and \overline{IK}

c. \overline{HJ} and \overline{IK}

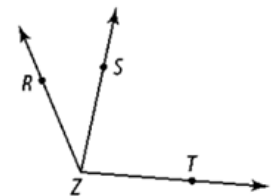
Numbers 23 and 24, refer to the diagram.

23. Name a pair of vertical angles
24. Name a straight angle in the figure



25. $\angle JKL$ and $\angle CDE$ are congruent. If $m\angle JKL = 137$, what is $m\angle CDE$?

26. If $m\angle RXT = 110$, $m\angle RZS = 3s$, and $m\angle TZS = 8s$, what are $m\angle RZS$ and $m\angle TZS$?

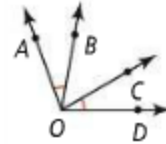


27. $PT=5x+3$ and $TQ=7x-9$, find the value of PT .

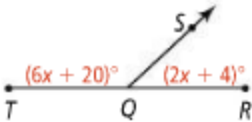


28. In the following diagram, solve for x given the following information.

$$m\angle AOB = 28, m\angle BOC = 3x - 2, m\angle AOD = 6x$$



29. $\angle RQT$ is a straight angle. What are $m\angle RQS$ and $m\angle TQS$?



30. \overline{BD} bisects $\angle ABC$. Solve for x and find $\angle ABC$, given the following information

$$m\angle ABC = 4x - 12, m\angle ABD = 24$$

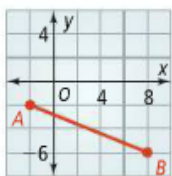
31. Find the coordinates of the midpoint of \overline{HX} , given the following points.

$$H(0,0), X(8,4)$$

32. The coordinates of point T are given. The midpoint of \overline{ST} is $(5, -8)$. Find the coordinates of point S , given the following coordinate point.

$$T(1,12)$$

33. Use the following graph to find **(a)** AB to the nearest tenth and **(b)** the coordinates of the midpoint of \overline{AB} .



34. A man is driving in a city that is built on a grid. His car is at point $S(77, 17)$ and he needs to get to a parking lot at point $T(14, 1)$.

- What coordinate points are halfway between the car and the parking lot?
- How far does the car have to travel to get to the parking lot, if the car can only travel along paths parallel to the axes of the coordinate plane?
- How much distance would the car save by going in a straight line versus moving only along paths parallel to the axes?

35. The area of a square rug is 144 ft^2 . There is a 3-ft-wide space between each edge of the rug and the wall. What is the area of the floor not covered by the rug?

