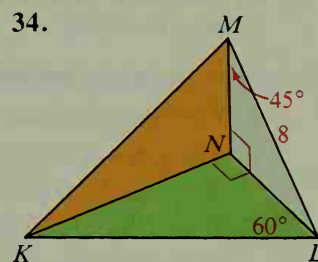
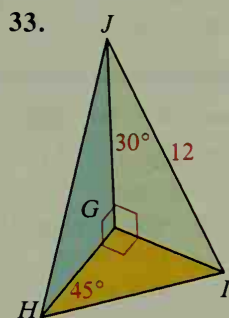
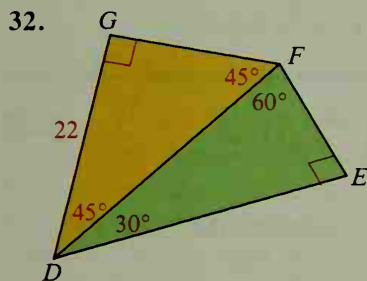


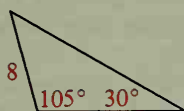
28. The diagonals of a rectangle are 8 units long and intersect at a  $60^\circ$  angle. Find the dimensions of the rectangle.
29. The perimeter of a rhombus is 64 and one of its angles has measure 120. Find the lengths of the diagonals.
30. Prove Theorem 8-6.
31. Explain why any triangle having sides in the ratio  $1:\sqrt{3}:2$  must be a  $30^\circ$ - $60^\circ$ - $90^\circ$  triangle.

Find the lengths of as many segments as possible.

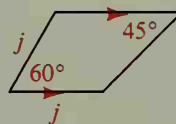


- C 35. In quadrilateral  $QRST$ ,  $m\angle R = 60$ ,  $m\angle T = 90$ ,  $QR = RS$ ,  $ST = 8$ , and  $TQ = 8$ .
- How long is the longer diagonal of the quadrilateral?
  - Find the ratio of  $RT$  to  $QS$ .

36. Find the perimeter of the triangle.



37. Find the length of the median of the trapezoid in terms of  $j$ .



38. If the wrench just fits the hexagonal nut, what is the value of  $x$ ?



- ★ 39. The six edges of the solid shown are 8 units long.  $A$  and  $B$  are midpoints of two edges as shown. Find  $AB$ .

