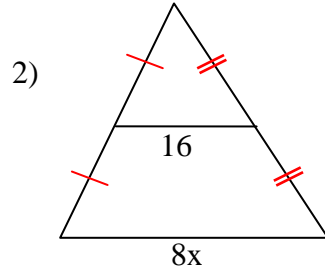
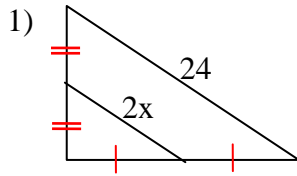


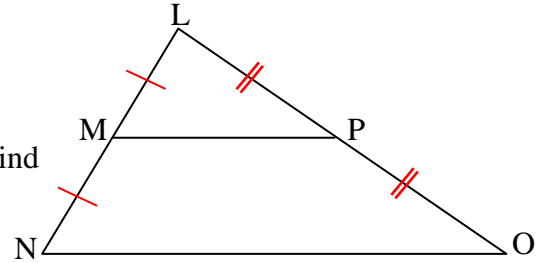
**Find the value of X.**



**Use the figure at the right for problem 3.**

3. a)  $\overline{MP}$  is the midsegment of  $\triangle LNO$ .  $NO = 36$ . Find  $MP$ .

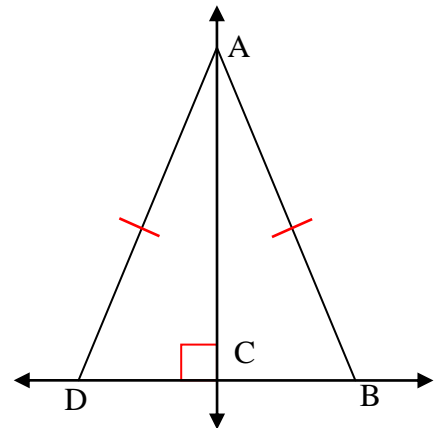
b) Given the information from 3.a),  $LO = 30$ , and  $MN = 9$ , find the perimeter of  $\triangle LMP$ .



**Use the figure at the right for problems 4-5.**

4) What can  $\overline{AC}$  be called?

5) What can you conclude about  $\angle ADC$  and  $\angle ABC$ ?

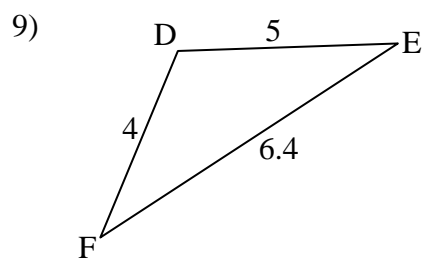
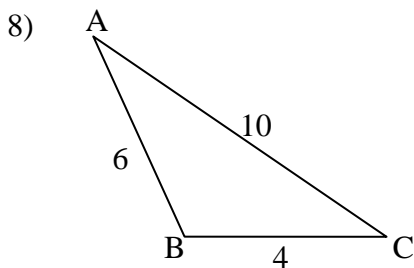


**Can a triangle have sides with the given lengths? Explain.**

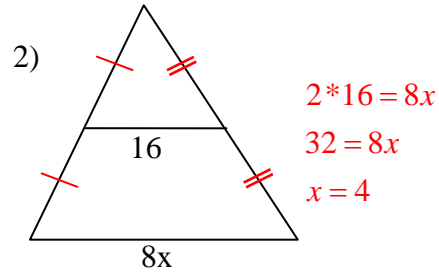
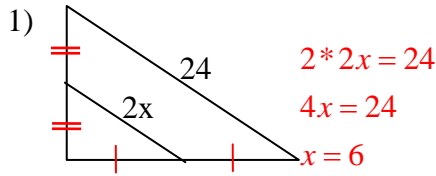
6) 4 m, 8 m, 6 m

7) 2.6 ft, 4.1 ft, 6.7 ft

**List the angles of each triangle in order from largest to smallest.**

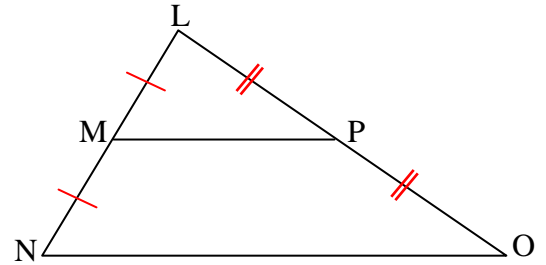


**Find the value of X.**



**Use the figure at the right for problem 3.**

3. a)  $\overline{MP}$  is the midsegment of  $\triangle LNO$ .  $NO = 36$ . Find  $MP$ .  
 $2 * MP = NO = 36$   
 $MP = 18$

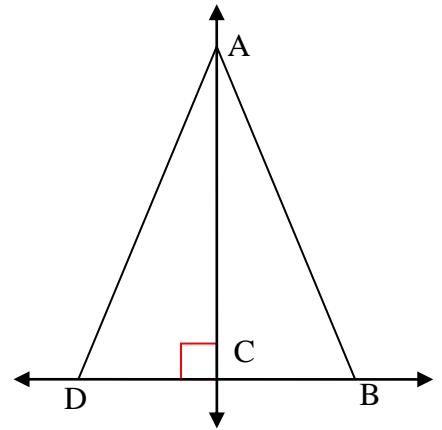


- b) Given the information from 3.a),  $LO = 30$ , and  $MN = 9$ , find the perimeter of  $\triangle LMP$ .

$LO = 30; LP = \frac{1}{2}LO = 15$   
 $LM = MN; LM = 9$   
 $MP = 18$  (prior prob)  
 $perim = 15 + 9 + 18 = 42$

**Use the figure at the right for problems 4-5.**

- 4) What can  $\overline{AC}$  be called? **Altitude**
- 5) What can you conclude about  $\angle ADC$  and  $\angle ABC$ ?  
**nothing, not enough information**



**Can a triangle have sides with the given lengths? Explain.**

- $4 + 8 > 6$  **YES**
- 6)  $4\text{ m}, 8\text{ m}, 6\text{ m}$   $6 + 4 > 8$   
 $8 + 6 > 4$
- 7)  $2.6\text{ ft}, 4.1\text{ ft}, 6.7\text{ ft}$   $2.6 + 4.1 = 6.7$  **NO**

**List the angles of each triangle in order from largest to smallest.**

