LT 2.2 Homework

Example 1 **Find the measure of each numbered angle.**

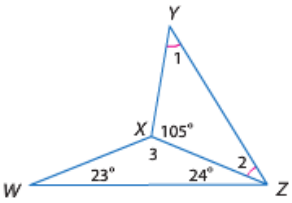
12. 

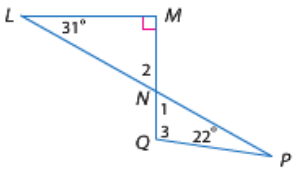
60

13. 

30

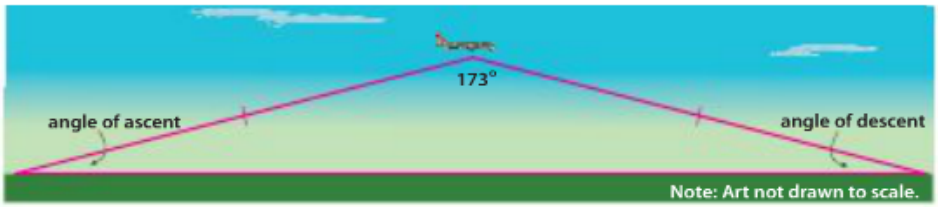
14. $m\angle 1 = 37.5$, $m\angle 2 = 37.5$, $m\angle 3 = 133$

14. 

15. 

15. $m\angle 1 = 59$, $m\angle 2 = 59$, $m\angle 3 = 99$

16. **AIRPLANES** The path of an airplane can be modeled using two sides of a triangle as shown. The distance covered during the plane's ascent is equal to the distance covered during its descent.



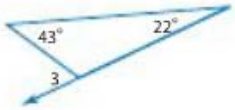
a. Classify the model using its sides and angles. **isosceles, obtuse**

b. The angles of ascent and descent are congruent. Find their measures. **3.5**

Example 2 **Find each measure.**

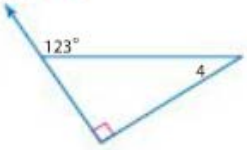
17. $m\angle 1$ **79**

18. $m\angle 3$ **65**

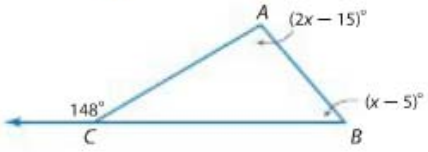


19. $m\angle 2$ **21**

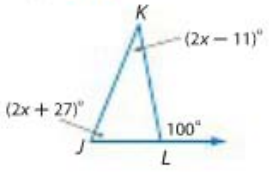
20. $m\angle 4$ **33**



21. $m\angle ABC$ **51**



22. $m\angle JKL$ **31**



Example 3

23. WHEELCHAIR RAMP Suppose the wheelchair ramp shown makes a 12° angle with the ground. What is the measure of the angle the ramp makes with the van door? **78**

CCSS **REGULARITY** Find each measure.

24. $m\angle 1$ **62**

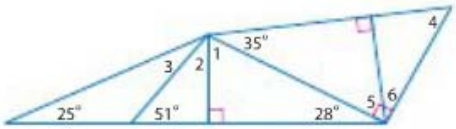
25. $m\angle 2$ **39**

26. $m\angle 3$ **26**

27. $m\angle 4$ **55**

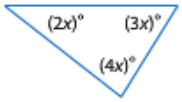
28. $m\angle 5$ **55**

29. $m\angle 6$ **35**



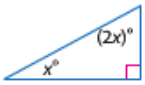
B **ALGEBRA** Find the value of x. Then find the measure of each angle.

30.



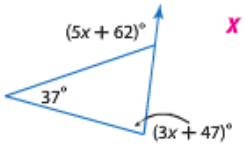
$x = 20$; 40, 60, 80

31.



$x = 30$; 30, 60

32.



$x = 11$; 80, 117