

Sixth Grade: Activity 22 Practice
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Lesson 22-1

1. Isosceles
2. Scalene
3. a. Scalene
b. Equilateral
c. Isosceles
4. No
5. Yes; scalene
6. Yes; isosceles
7. No
8. Yes; scalene
9. Yes; equilateral
10. Yes; isosceles
11. No
12. No
13. Yes; scalene
14. b and c
15. Maximum length is less than 38 feet.
Minimum length is more than 2 feet.
16. A
31. C
32. The side opposite the 71° angle is the longest because it is the greatest angle measure.
33. Answers may vary. The third angle would have to measure 54° . Two angles in an isosceles triangle have to have the same measure, and since the other two angles measure 52° and 74° , the triangle cannot be isosceles.
34. Answers may vary. Yes, a triangle can have at most one right angle or one obtuse angle. This means that the other two angles must be acute. An acute triangle has three acute angles.
35. Answers may vary. Triangles with three congruent sides are equilateral. Triangles with two congruent sides are isosceles. Triangles with no congruent sides are scalene. Triangles with three acute angles are acute. Triangles with one obtuse angle are obtuse. Triangles with one right angle are right triangles. Check students' drawings.

Lesson 22-2

17. 125°
18. scalene and obtuse
19. a. Check students' drawings.
b. Check students' drawings.
c. Not possible since each angle of an equilateral triangle is 60° .
20. 20°
21. 60°
22. 48°
23. 35°
24. 84°
25. 30°
26. 90° ; scalene, right
27. 9° ; isosceles, obtuse
28. 60° ; equilateral, acute
29. 63° ; scalene, acute
30. 90° ; scalene, right