Answer Presentation Tool

Book Course 3 Chapter 3

Section 2 - Exercises Exercises 4, 7-9, 12-16, 19-21 (26 exercises.)

Display Cols 1 Show Solutions

4. 30°, 60°, 90°

7. 25°, 45°, 110°

8. 44°, 48°, 88°

9. 48°, 59°, 73°

12. 128°

13. 140°

14. 108°

15. The measure of the exterior angle is equal to the sum of the measures of the two nonadjacent interior angles. The sum of all three angles is not 180°;

$$(2x - 12) = x + 30$$
$$x = 42$$

The exterior angle is $(2(42) - 12)° = 72°$.

16. See *Taking Math Deeper.*

19. sometimes; The sum of the angle measures must equal 180°.

20. always; Because the sum of the interior angle measures must equal 180° and one of the interior angles is 90°, the other two interior angles must sum to 90°.

21. never; If a triangle had more than one vertex with an acute exterior angle, then it would have to have more than one obtuse interior angle which is impossible.