Area of oblique triangles

Conditions: you must have two side lengths and the angle between them.

Formula:
- $Area = \frac{1}{2}ab\,Sin\,C$

- $Area = \frac{1}{2}ac\,Sin\,B$

- $Area = \frac{1}{2}bc\,Sin\,A$

Hints: if you do not have the conditions, use either the Law of Sin or Law of Cos to complete the conditions necessary to use the Area Formula.

Calculate the area of the following triangles:

1. a = 1, b = 4, <A = 15°

2. a = 2, b = 4, <C = 20°

3. a = 3, b = 4, <A = 30°

4. b = 5, c = 3, <A = 20°

5. b = 6, c = 3, <C = 20°

6. b = 7, c = 3, <A = 20°

7. a = 2, c = 8, <C = 40°

8. a = 2, c = 9, <C = 50°

9. a = 2, c = 10, <B = 60°

10. a = 10, b = 15, c = 20

11. a = 1, b = 2, <A = 15°

12. a = 2, b = 4, <C = 20°

13. a = 3, b = 8, <A = 30°

19. a = 8, c = 10, <B = 60°

14. b = 5, c = 6, <A = 20°

20. a = 2, b = 3, c = 4

15. b = 6, c = 9, <C = 20°

21. a = 3, b = 4, c = 5

16. b = 7, c = 12, <A = 20°

22. a = 1, b = 2, c = 3

17. a = 4, c = 8, <C = 40°

23. a = 4, b = 6, c = 8

18. a = 6, c = 9, <C = 50°

24. a = 20, b = 30, c = 40