

**A2.A.75: Law of Sines - The Ambiguous Case 4: Determine the solution(s) from the SSA situation (ambiguous case)**

- 1 If  $a = 4$ ,  $b = 5$ , and  $m\angle A = 30$ , the number of distinct triangles that may be constructed is
  - 1) 1
  - 2) 2
  - 3) 3
  - 4) 0
  
- 2 If  $m\angle A = 68$ , side  $a = 10$ , and side  $b = 24$ , how many distinct triangles that can be constructed?
  - 1) 1
  - 2) 2
  - 3) 3
  - 4) 0
  
- 3 If  $a = 6$ ,  $b = 5$ , and  $m\angle A = 30$ , the number of distinct triangles which can be constructed is
  - 1) 1
  - 2) 2
  - 3) 3
  - 4) 0
  
- 4 If  $m\angle A = 30$ ,  $a = \sqrt{5}$ , and  $b = 6$ , the number of triangles that can be constructed is
  - 1) 1
  - 2) 2
  - 3) 0
  - 4) an infinite number
  
- 5 How many distinct triangles can be formed if  $m\angle A = 30$ ,  $b = 12$  and  $a = 6$ ?
  - 1) 1
  - 2) 2
  - 3) 3
  - 4) 0
  
- 6 How many distinct triangles can be constructed if  $m\angle A = 30$ ,  $b = 12$ , and  $a = 7$ ?
  - 1) 1
  - 2) 2
  - 3) 3
  - 4) 0
  
- 7 If  $m\angle A = 30$ ,  $a = 11$ , and  $b = 12$ , the number of distinct triangles that can be constructed is
  - 1) 1
  - 2) 2
  - 3) 3
  - 4) 0
  
- 8 If  $a = 5$ ,  $b = 7$ , and  $m\angle A = 30$ , how many distinct triangles can be constructed?
  - 1) 1
  - 2) 2
  - 3) 3
  - 4) 0
  
- 9 If  $a = 5\sqrt{2}$ ,  $b = 8$ , and  $m\angle A = 45$ , how many distinct triangles can be constructed?
  - 1) 1
  - 2) 2
  - 3) 3
  - 4) 0



**A2.A.75: Law of Sines - The Ambiguous Case 4: Determine the solution(s) from the SSA situation (ambiguous case)****Answer Section**

1	ANS: 2	REF: 068124siii
2	ANS: 4	REF: 010433siii
3	ANS: 1	REF: 018735siii
4	ANS: 3	REF: 018934siii
5	ANS: 1	REF: 019028siii
6	ANS: 2	REF: 069035siii
7	ANS: 2	REF: 089033siii
8	ANS: 2	REF: 069534siii
9	ANS: 2	REF: 089529siii
10	ANS: 1	REF: 069633siii
11	ANS: 2	REF: 019834siii
12	ANS: 4	REF: 069834siii
13	ANS: 2	REF: 010023siii
14	ANS: 2	REF: 060127siii
15	ANS: 4	REF: 080134siii
16	ANS: 2	REF: 010231siii
17	ANS: 1	REF: 010330siii
18	ANS: 4	REF: 060335siii