Determine if the statement is possible (p) or impossible (i).

1) A triangle with the angles: 78°, 56° and 46°
2) A triangle with the angles: 26°, 135° and 19°
3) A triangle with the angles: 4°, 159° and 17°
4) A triangle with the angles: 69°, 47° and 64°
5) A triangle with the angles: 178°, 1° and 1°
6) A triangle with the angles: 27°, 152° and 1°
7) A triangle with the angles: 110°, 30° and 27°
8) A triangle with the angles: 106°, 48° and 26°
9) A triangle with the angles: 60°, 23° and 97°
10) A triangle with the angles: 20°, 73° and 65°
11) A triangle with the sides: 3mm., 3mm. and 2mm.
12) A triangle with the sides: 5mm., 5mm. and 1mm.
13) A triangle with the sides: 9in., 9in. and 9in.
14) A triangle with the sides: 2ft., 2ft. and 1ft.
15) A triangle with the sides: 10ft., 3ft. and 2ft.
16) A triangle with the sides: 2cm., 6cm. and 1cm.
17) A triangle with the sides: 2cm., 6cm. and 1cm.
18) A triangle with the sides: 9cm., 2cm. and 1cm.
19) A triangle with the sides: 2mm., 8mm. and 9mm.
20) A triangle with the sides: 9cm., 9cm. and 9cm.
Identifying Triangle Angles and Lengths

Determine if the statement is possible (p) or impossible (i).

1) A triangle with the angles: 78°, 56° and 46°
2) A triangle with the angles: 26°, 135° and 19°
3) A triangle with the angles: 4°, 159° and 17°
4) A triangle with the angles: 69°, 47° and 64°
5) A triangle with the angles: 178°, 1° and 1°
6) A triangle with the angles: 27°, 152° and 1°
7) A triangle with the angles: 110°, 30° and 27°
8) A triangle with the angles: 106°, 48° and 26°
9) A triangle with the angles: 60°, 23° and 97°
10) A triangle with the angles: 20°, 73° and 65°
11) A triangle with the sides: 3mm., 3mm. and 2mm.
12) A triangle with the sides: 5mm., 5mm. and 1mm.
13) A triangle with the sides: 9in., 9in. and 9in.
14) A triangle with the sides: 2ft., 2ft. and 1ft.
15) A triangle with the sides: 10ft., 3ft. and 2ft.
16) A triangle with the sides: 2cm., 6cm. and 1cm.
17) A triangle with the sides: 2cm., 6cm. and 1cm.
18) A triangle with the sides: 9cm., 2cm. and 1cm.
19) A triangle with the sides: 2mm., 8mm. and 9mm.
20) A triangle with the sides: 9cm., 9cm. and 9cm.

Answers:

1. p
2. p
3. p
4. p
5. p
6. p
7. i
8. p
9. p
10. i
11. p
12. p
13. p
14. p
15. i
16. i
17. i
18. i
19. p
20. p