



## Identifying Triangle Angles and Lengths

Name: \_\_\_\_\_

**Determine if the statement is possible(p) or impossible(i).**1) A triangle with the angles:  $51^\circ$ ,  $9^\circ$  and  $120^\circ$ .**Answers**

1. \_\_\_\_\_

2) A triangle with the angles:  $126^\circ$ ,  $12^\circ$  and  $35^\circ$ .

2. \_\_\_\_\_

3) A triangle with the angles:  $1^\circ$ ,  $2^\circ$  and  $157^\circ$ .

3. \_\_\_\_\_

4) A triangle with the angles:  $18^\circ$ ,  $9^\circ$  and  $148^\circ$ .

4. \_\_\_\_\_

5) A triangle with the angles:  $91^\circ$ ,  $65^\circ$  and  $10^\circ$ .

5. \_\_\_\_\_

6) A triangle with the angles:  $89^\circ$ ,  $67^\circ$  and  $11^\circ$ .

6. \_\_\_\_\_

7) A triangle with the angles:  $53^\circ$ ,  $94^\circ$  and  $12^\circ$ .

7. \_\_\_\_\_

8) A triangle with the angles:  $84^\circ$ ,  $6^\circ$  and  $90^\circ$ .

8. \_\_\_\_\_

9) A triangle with the angles:  $59^\circ$ ,  $94^\circ$  and  $1^\circ$ .

9. \_\_\_\_\_

10) A triangle with the angles:  $57^\circ$ ,  $7^\circ$  and  $116^\circ$ .

10. \_\_\_\_\_

11) A triangle with the sides: 7in, 7in and 7in.

11. \_\_\_\_\_

12) A triangle with the sides: 10mm, 10mm and 10mm.

12. \_\_\_\_\_

13) A triangle with the sides: 6mm, 2mm and 1mm.

13. \_\_\_\_\_

14) A triangle with the sides: 2ft, 10ft and 1ft.

14. \_\_\_\_\_

15) A triangle with the sides: 6cm, 4cm and 3cm.

15. \_\_\_\_\_

16) A triangle with the sides: 9mm, 3mm and 2mm.

16. \_\_\_\_\_

17) A triangle with the sides: 5in, 5in and 5in.

17. \_\_\_\_\_

18) A triangle with the sides: 9in, 9in and 9in.

18. \_\_\_\_\_

19) A triangle with the sides: 4in, 2in and 5in.

19. \_\_\_\_\_

20) A triangle with the sides: 3cm, 5cm and 6cm.

20. \_\_\_\_\_



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- 2) A triangle with the angles:  $126^\circ$ ,  $12^\circ$  and  $35^\circ$ .
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- 5) A triangle with the angles:  $91^\circ$ ,  $65^\circ$  and  $10^\circ$ .
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- 9) A triangle with the angles:  $59^\circ$ ,  $94^\circ$  and  $1^\circ$ .
- 10) A triangle with the angles:  $57^\circ$ ,  $7^\circ$  and  $116^\circ$ .
- 11) A triangle with the sides: 7in, 7in and 7in.
- 12) A triangle with the sides: 10mm, 10mm and 10mm.
- 13) A triangle with the sides: 6mm, 2mm and 1mm.
- 14) A triangle with the sides: 2ft, 10ft and 1ft.
- 15) A triangle with the sides: 6cm, 4cm and 3cm.
- 16) A triangle with the sides: 9mm, 3mm and 2mm.
- 17) A triangle with the sides: 5in, 5in and 5in.
- 18) A triangle with the sides: 9in, 9in and 9in.
- 19) A triangle with the sides: 4in, 2in and 5in.
- 20) A triangle with the sides: 3cm, 5cm and 6cm.

**Answers**

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