



## Identifying Triangle Angles and Lengths

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

**Determine if the statement is possible(p) or impossible(i).**1) A triangle with the angles:  $128^\circ$ ,  $14^\circ$  and  $38^\circ$ .**Answers**

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

2) A triangle with the angles:  $4^\circ$ ,  $137^\circ$  and  $14^\circ$ .

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

3) A triangle with the angles:  $27^\circ$ ,  $138^\circ$  and  $15^\circ$ .

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

4) A triangle with the angles:  $2^\circ$ ,  $107^\circ$  and  $51^\circ$ .

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

5) A triangle with the angles:  $111^\circ$ ,  $11^\circ$  and  $58^\circ$ .

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

6) A triangle with the angles:  $66^\circ$ ,  $34^\circ$  and  $58^\circ$ .

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

7) A triangle with the angles:  $143^\circ$ ,  $3^\circ$  and  $8^\circ$ .

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

8) A triangle with the angles:  $2^\circ$ ,  $142^\circ$  and  $13^\circ$ .

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

9) A triangle with the angles:  $44^\circ$ ,  $4^\circ$  and  $132^\circ$ .

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

10) A triangle with the angles:  $8^\circ$ ,  $28^\circ$  and  $137^\circ$ .

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

11) A triangle with the sides: 8in, 8in and 7in.

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

12) A triangle with the sides: 10cm, 3cm and 2cm.

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

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

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

14) A triangle with the sides: 3ft, 5ft and 2ft.

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

15) A triangle with the sides: 3mm, 7mm and 2mm.

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

16) A triangle with the sides: 10cm, 10cm and 5cm.

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

17) A triangle with the sides: 9ft, 4ft and 3ft.

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

18) A triangle with the sides: 9ft, 9ft and 8ft.

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

19) A triangle with the sides: 6in, 6in and 6in.

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

20) A triangle with the sides: 5ft, 5ft and 5ft.

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



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

1) A triangle with the angles:  $128^\circ$ ,  $14^\circ$  and  $38^\circ$ .

1. **p**

2) A triangle with the angles:  $4^\circ$ ,  $137^\circ$  and  $14^\circ$ .

2. **i**

3) A triangle with the angles:  $27^\circ$ ,  $138^\circ$  and  $15^\circ$ .

3. **p**

4) A triangle with the angles:  $2^\circ$ ,  $107^\circ$  and  $51^\circ$ .

4. **i**

5) A triangle with the angles:  $111^\circ$ ,  $11^\circ$  and  $58^\circ$ .

5. **p**

6) A triangle with the angles:  $66^\circ$ ,  $34^\circ$  and  $58^\circ$ .

6. **i**

7) A triangle with the angles:  $143^\circ$ ,  $3^\circ$  and  $8^\circ$ .

7. **i**

8) A triangle with the angles:  $2^\circ$ ,  $142^\circ$  and  $13^\circ$ .

8. **i**

9) A triangle with the angles:  $44^\circ$ ,  $4^\circ$  and  $132^\circ$ .

9. **p**

10) A triangle with the angles:  $8^\circ$ ,  $28^\circ$  and  $137^\circ$ .

10. **i**

11) A triangle with the sides: 8in, 8in and 7in.

11. **p**

12) A triangle with the sides: 10cm, 3cm and 2cm.

12. **i**

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

13. **p**

14) A triangle with the sides: 3ft, 5ft and 2ft.

14. **i**

15) A triangle with the sides: 3mm, 7mm and 2mm.

15. **i**

16) A triangle with the sides: 10cm, 10cm and 5cm.

16. **p**

17) A triangle with the sides: 9ft, 4ft and 3ft.

17. **i**

18) A triangle with the sides: 9ft, 9ft and 8ft.

18. **p**

19) A triangle with the sides: 6in, 6in and 6in.

19. **p**

20) A triangle with the sides: 5ft, 5ft and 5ft.

20. **p**

## Answers

1. **p**

2. **i**

3. **p**

4. **i**

5. **p**

6. **i**

7. **i**

8. **i**

9. **p**

10. **i**

11. **p**

12. **i**

13. **p**

14. **i**

15. **i**

16. **p**

17. **i**

18. **p**

19. **p**

20. **p**

1-10	95	90	85	80	75	70	65	60	55	50
11-20	45	40	35	30	25	20	15	10	5	0