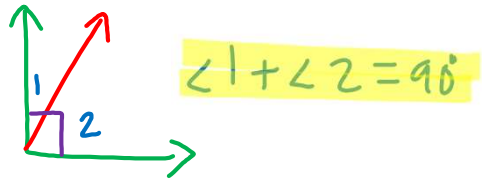
Triangle Congruence Theorems

- SSS≅
- SAS≅
- AAS≅
- ASA≅
- HL≅

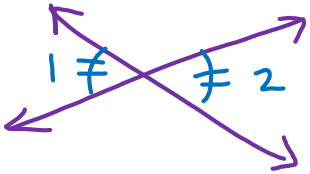
The given parts guarantee that ALL angles and sides match up so the triangles have to be equal (congruent)

Angle Relationships

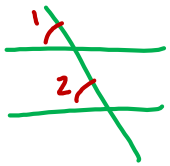
- Supplementary/Linear Pair (add to 180°)



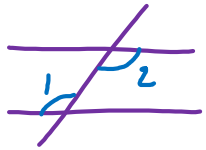
- Complementary (add to 90°)



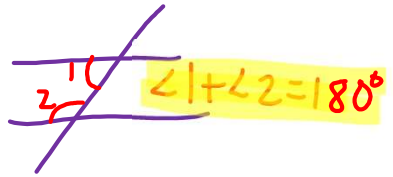
- Vertical (equal)



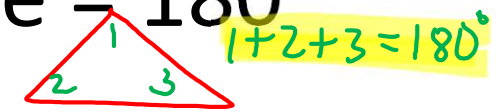
- Corresponding (equal)



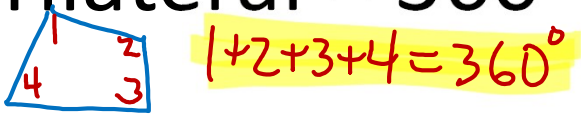
- Alternate Interior (equal)



- Same side interior (add to 180°)

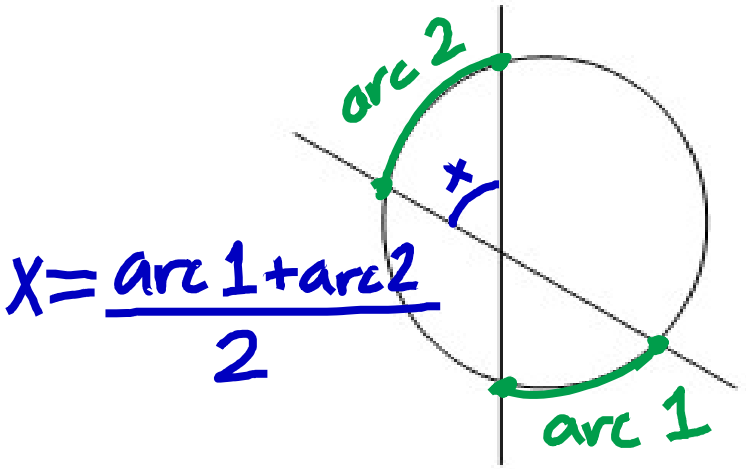


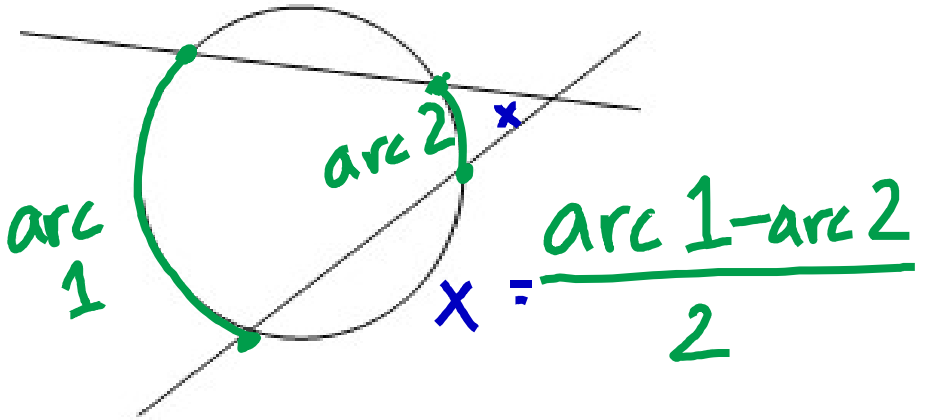
- Three interior angles of triangle = 180°

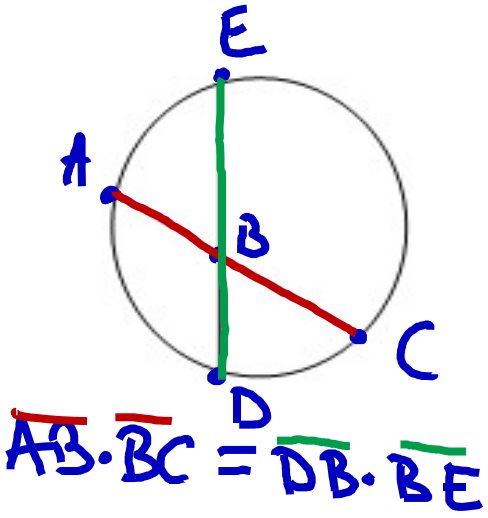


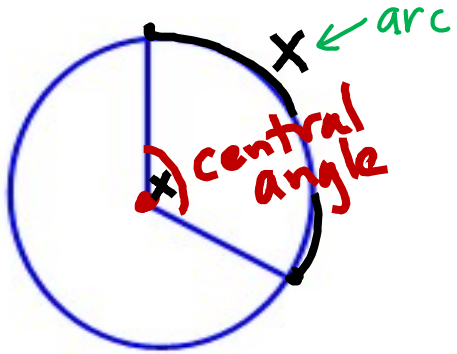
- Four interior angles of quadrilateral = 360°

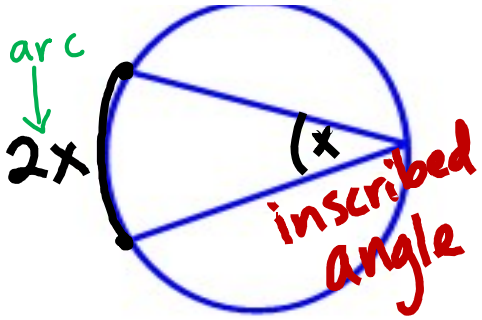
Relationships of circles, arcs, angles, intersecting chords

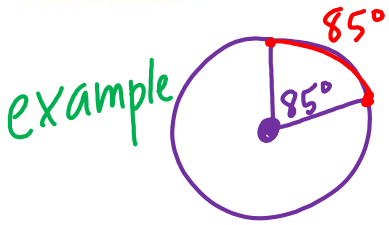


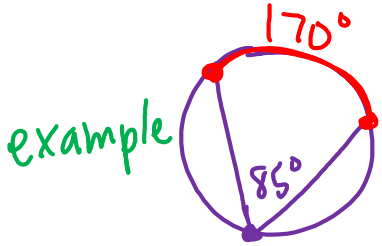






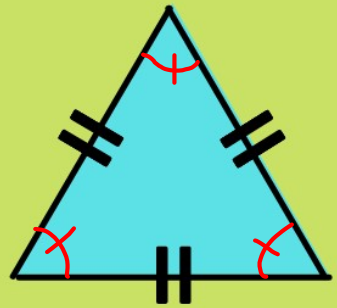




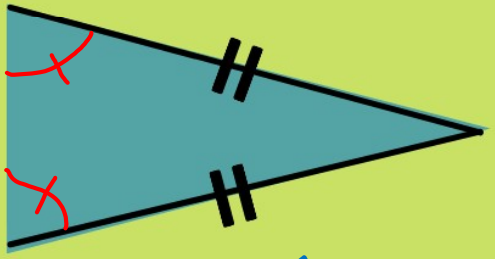


Types of Triangles

By Side



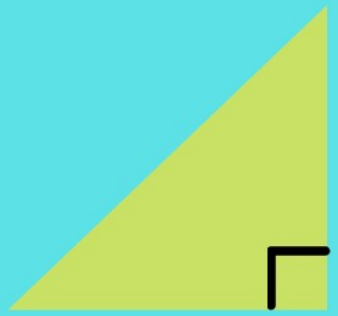
Equilateral
3 equal sides
all angles 60°



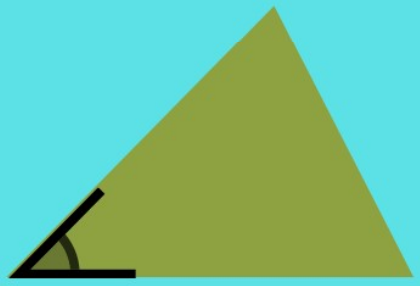
Isosceles
2 equal sides
2 equal angles

Scalene
no equal sides
no equal angles

By Angle



Right
1 angle = 90°



Acute
all angles < 90°

Obtuse
1 angle > 90°

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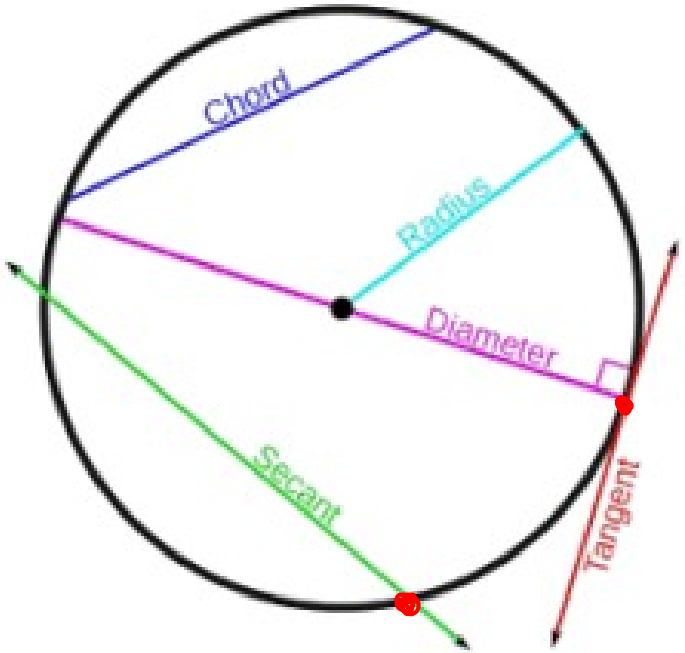
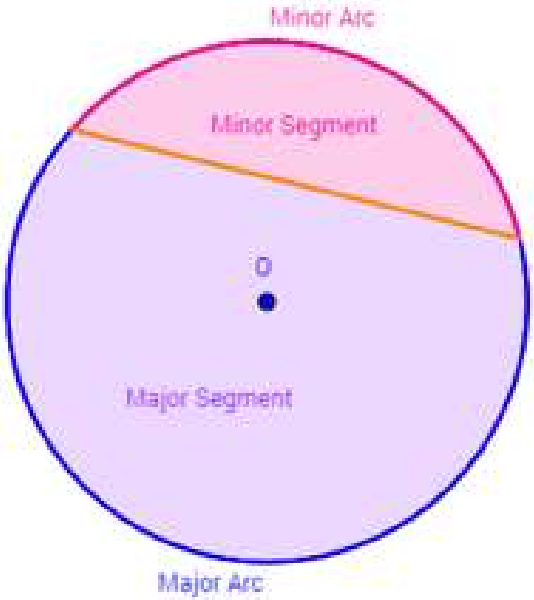
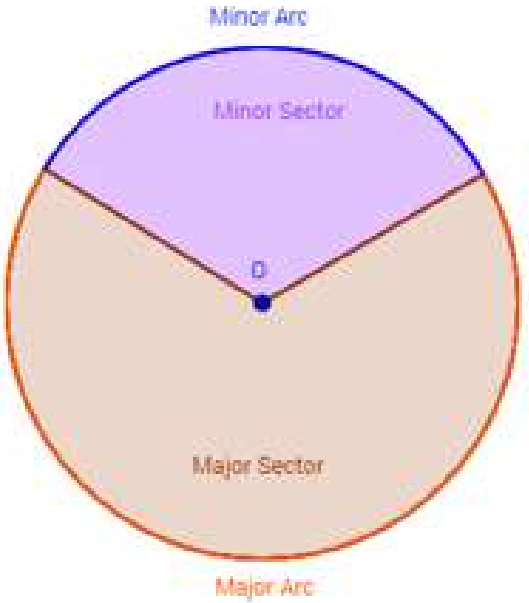
Tangent line, secant line, chord, arc, sector







Check answers for geometry review:

1. D
2. A
3. B
4. G
5. C
6. J
7. A
8. J
9. A
10. C

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Check answers for geometry review:

11. C **12. A**

13. B **14. B**

15. E

16. E **17. C**

18. A **19. B**

Check answers for geometry review:

35. C
41. A
42. B
44. A
45. J
46. A
91. C
92. B

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