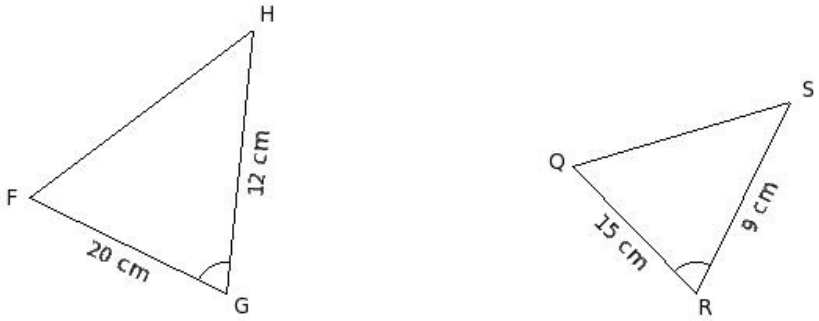
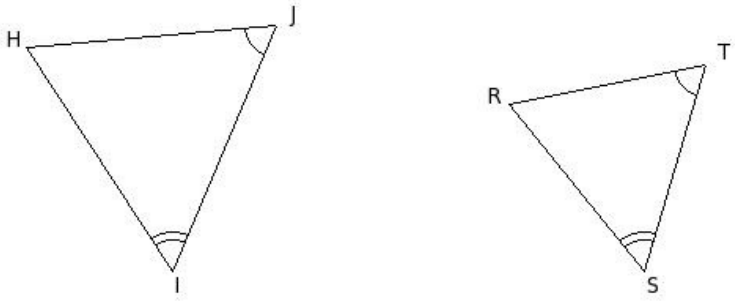
1. Identify the property by which the two given triangles are similar



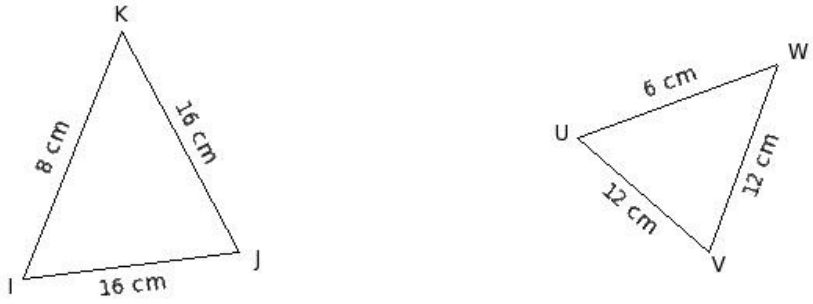
(i) not similar (ii) AAA Similarity (iii) SSS Similarity (iv) SAS Similarity

2. Identify the property by which the two given triangles are similar



(i) SAS Similarity (ii) SSS Similarity (iii) not similar (iv) AAA Similarity

3. Identify the property by which the two given triangles are similar

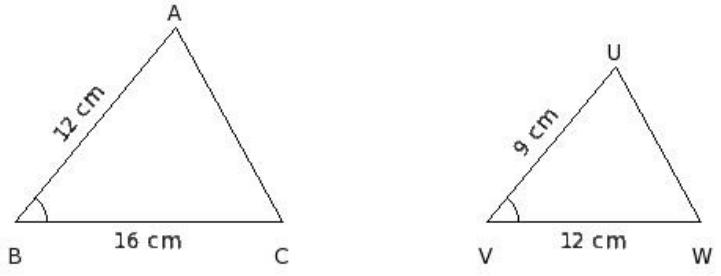


(i) AAA Similarity (ii) SAS Similarity (iii) SSS Similarity (iv) not similar

In the given figure, △ABC and △UVW are such that

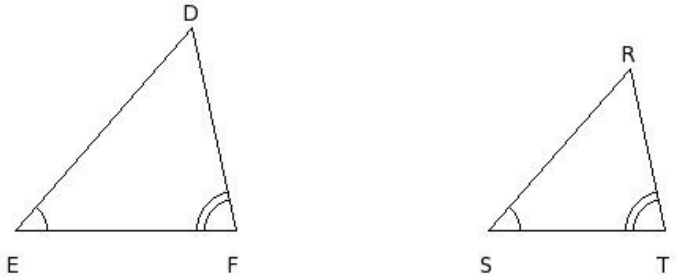
4. $\angle B = \angle V$ and $\frac{AB}{UV} = \frac{BC}{VW}$.

Identify the property by which the two triangles are similar



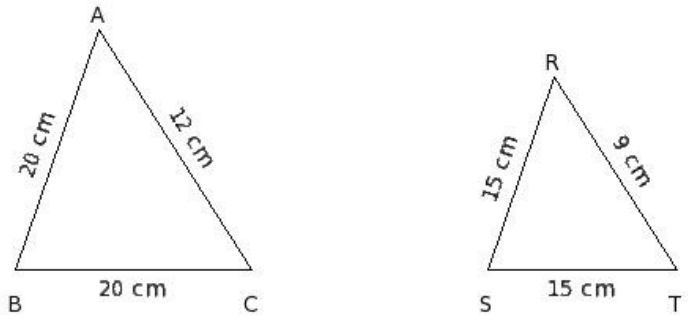
(i) SSS Similarity (ii) AAA Similarity (iii) not similar (iv) SAS Similarity

5. In the given figure, △DEF and △RST are such that
$\angle E = \angle S$ and $\angle F = \angle T$.
Identify the property by which the two triangles are similar



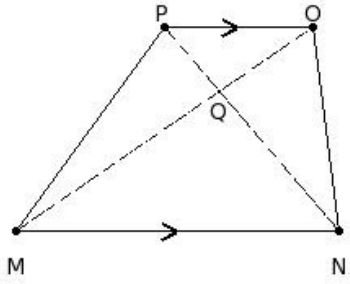
(i) SSS Similarity (ii) not similar (iii) SAS Similarity (iv) AAA Similarity

6. In the given figure, △ABC and △RST are such that
$\frac{AB}{RS} = \frac{BC}{ST} = \frac{CA}{TR}$.
Identify the property by which the two triangles are similar



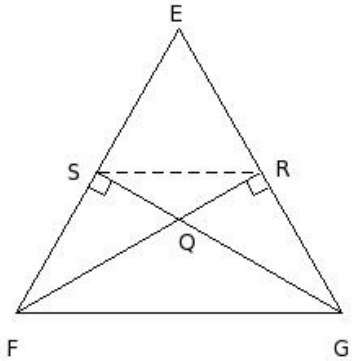
(i) not similar (ii) AAA Similarity (iii) SSS Similarity (iv) SAS Similarity

7. In the given figure, MNOP is a trapezium in which
MN ∥ OP and the diagonals NP and MO intersect at Q. △QMN ~



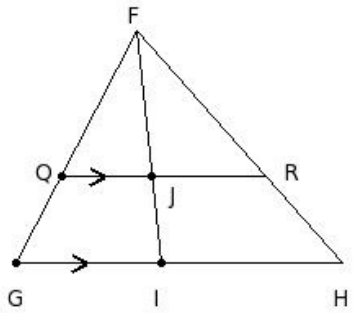
(i) △QOP (ii) △QPM (iii) △QNO (iv) △PMN (v) △NOP

8. In the given figure, the altitudes RF and GS of △EFG meet at Q. △SFQ ~



(i) △RGF (ii) △QSR (iii) △SFG (iv) △QFG (v) △RGQ

9. In the given figure, QR ∥ GH , and median FI bisects QR. △FIH ~



(i) △FGI (ii) △FJR (iii) △FQJ (iv) △FGH (v) △GHF

10. Which of the following are true?

a) Any two squares are congruent.
b) Any two circles are similar.
c) Any two triangles are similar.
d) Any two circles are congruent.
e) Any two triangles are congruent.
f) Any two squares are similar.

(i) {c,f} (ii) {d,e,b} (iii) {b,f} (iv) {a,b} (v) {a,f,b}

11. Which of the following are true?

a) A circle is a polygonal region.
b) A square is a polygonal region.
c) A sector is a polygonal region.
d) A triangle is a polygonal region.
e) A semi-circle is a polygonal region.

(i) {e,a,b} (ii) {c,d} (iii) {b,d} (iv) {a,b} (v) {c,d,b}

12. Which of the following are true?

a) Similar figures have same area.
b) Similar and congruent are not synonymous.
c) Congruent figures have same area.
d) If two figures are congruent, then they are similar too.
e) If two figures are similar, then they are congruent too.

(i) {e,c} (ii) {b,c,d} (iii) {a,b} (iv) {a,b,c} (v) {a,e,d}

13. Which of the following are true?

a) Area of a convex polygonal region is equal to the sum of the areas of all triangles formed by joining the vertices of the polygon with an interior point.
b) A polygonal region can be divided into a finite number of triangles in a unique way.
c) Area of the union of two polygonal region is the sum of the individual area.
d) Area of the union of two polygonal region is not equal to the sum of the individual area.

(i) {b,d,a} (ii) {c,d} (iii) {b,a} (iv) {a,d} (v) {b,c,a}

14. Which of the following are necessary conditions for similarity of two polygons ?

a) The corresponding angles are equal.
b) The corresponding sides are equal.
c) The corresponding angles are proportional.
d) The corresponding sides are proportional.

(i) {b,c,a} (ii) {b,d,a} (iii) {c,d} (iv) {b,a} (v) {a,d}

15. Which of the following are true?

a) Similarity is symmetric.
b) Similarity is transitive.
c) Similarity is reflexive.
d) Similarity is anti symmetric.

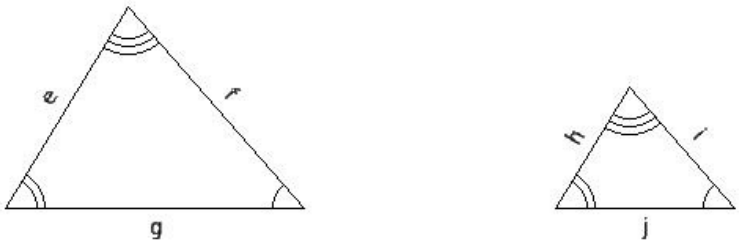
(i) {d,a,b} (ii) {d,a} (iii) {d,b} (iv) {a,b,c} (v) {d,c}

16. Which of the following are true?

a) Any two triangles are similar if the corresponding sides are proportional.
b) Any two quadrilaterals are similar if the corresponding angles are equal.
c) Any two triangles are similar if the corresponding angles are equal.
d) Any two quadrilaterals are similar if the corresponding sides are proportional.

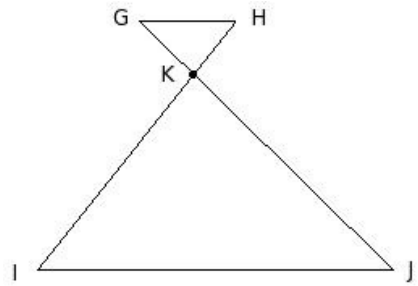
(i) {b,a,c} (ii) {b,d} (iii) {b,c} (iv) {b,a} (v) {a,c,d}

17. In the given two similar triangles, if e = 15 cm, f = 17 cm, g = 19 cm, i = 10.2 cm, find j



(i) 13.40 cm (ii) 10.40 cm (iii) 9.40 cm (iv) 12.40 cm (v) 11.40 cm

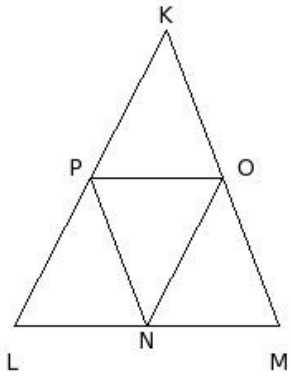
18. In the given figure, if GH ∥ IJ then



(i) △GHK ~ △KJI (ii) △KGH ~ △KIJ (iii) △GHK ~ △KIJ (iv) △GHK ~ △JIK (v) △KHG ~ △KJI

19. In the given figure, points N , O and P are the mid-points of sides LM, MK and KL of △KLM. Which of the following are true?

a) △NPO ~ △KLM
b) △ONM ~ △KLM
c) △KPO ~ △KLM
d) △NOP ~ △KLM
e) △PLN ~ △KLM



(i) {a,c} (ii) {a,b} (iii) {a,e,b} (iv) {b,c,d,e} (v) {a,d}

Assignment Key

1) (iv)	2) (iv)	3) (iii)	4) (iv)	5) (iv)	6) (iii)
7) (i)	8) (v)	9) (ii)	10) (iii)	11) (iii)	12) (ii)
13) (iv)	14) (v)	15) (iv)	16) (v)	17) (v)	18) (iv)
19) (iv)					