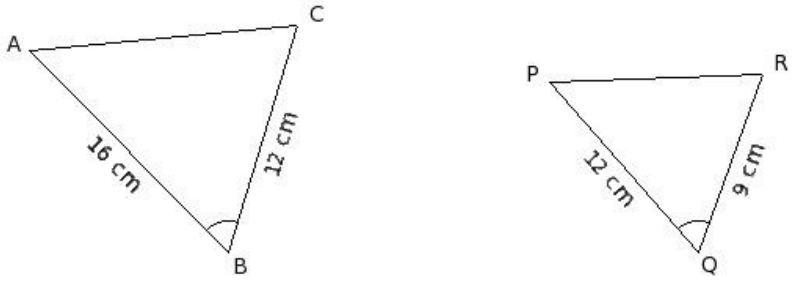
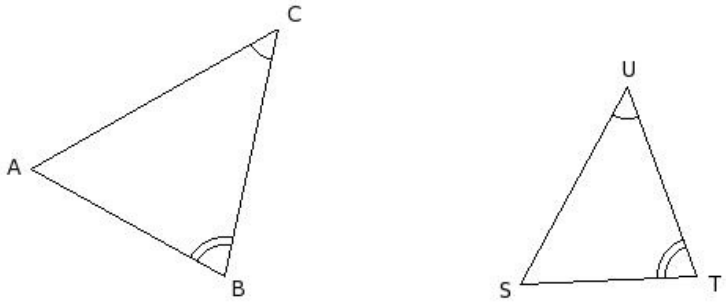
1. Identify the property by which the two given triangles are similar



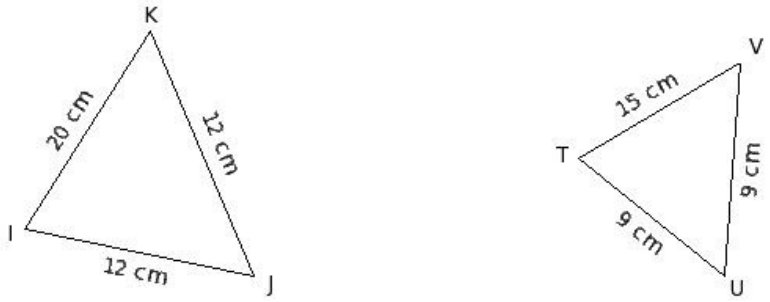
(i) AAA Similarity (ii) not similar (iii) SSS Similarity (iv) SAS Similarity

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



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

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

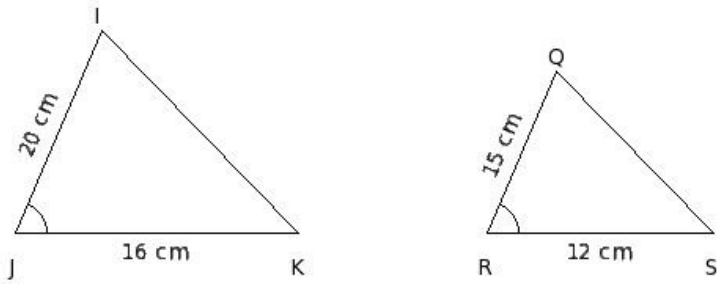


(i) not similar (ii) AAA Similarity (iii) SSS Similarity (iv) SAS Similarity

In the given figure, △IJK and △QRS are such that

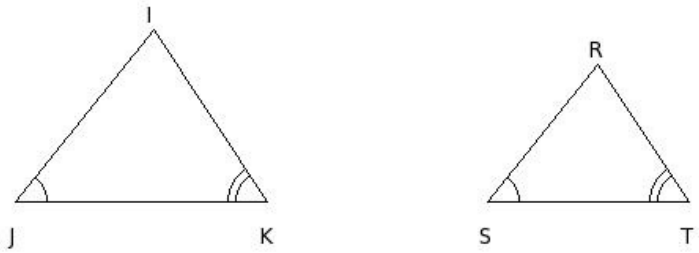
4. $\angle J = \angle R$ and $\frac{IJ}{QR} = \frac{JK}{RS}$.

Identify the property by which the two triangles are similar



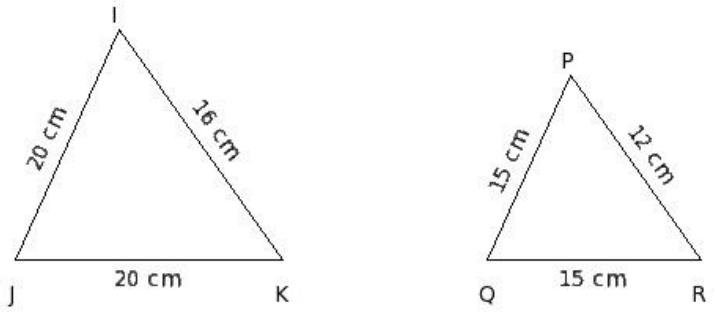
(i) AAA Similarity (ii) SSS Similarity (iii) not similar (iv) SAS Similarity

5. In the given figure, $\triangle IJK$ and $\triangle RST$ are such that $\angle J = \angle S$ and $\angle K = \angle T$.
Identify the property by which the two triangles are similar



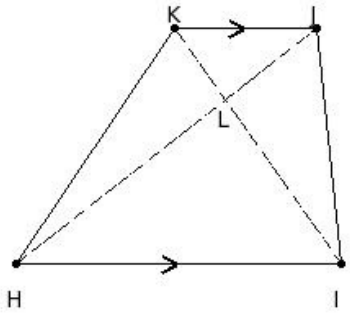
(i) SAS Similarity (ii) AAA Similarity (iii) not similar (iv) SSS Similarity

6. In the given figure, $\triangle IJK$ and $\triangle PQR$ are such that $\frac{IJ}{PQ} = \frac{JK}{QR} = \frac{KI}{RP}$.
Identify the property by which the two triangles are similar



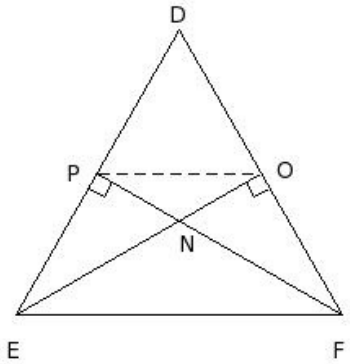
(i) AAA Similarity (ii) SSS Similarity (iii) SAS Similarity (iv) not similar

7. In the given figure, HIJK is a trapezium in which HI ∥ JK and the diagonals IK and HJ intersect at L. $\triangle LJK$ ~



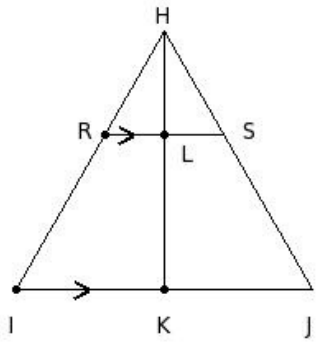
(i) $\triangle LKH$ (ii) $\triangle KHI$ (iii) $\triangle LHI$ (iv) $\triangle LIJ$ (v) $\triangle IJK$

8. In the given figure, the altitudes OE and FP of $\triangle DEF$ meet at N. $\triangle OFN$ ~



(i) $\triangle OFE$ (ii) $\triangle PEN$ (iii) $\triangle NPO$ (iv) $\triangle NEF$ (v) $\triangle PEF$

9. In the given figure, RS ∥ IJ , and median HK bisects RS. △HIK ~



(i) △HLS (ii) △HKJ (iii) △HRL (iv) △HIJ (v) △IJH

10. Which of the following are true?

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

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

11. Which of the following are true?

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

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

12. Which of the following are true?

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

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

13. Which of the following are true?

a) Area of the union of two polygonal region is not equal to the sum of the individual area.
b) A polygonal region can be divided into a finite number of triangles in a unique way.
c) 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.
d) Area of the union of two polygonal region is the sum of the individual area.

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

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

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

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

15. Which of the following are true?

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

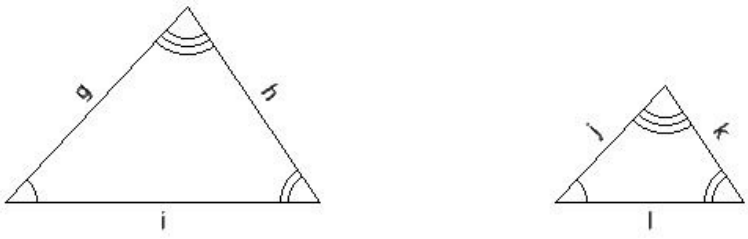
(i) {a,b,c} (ii) {d,a,b} (iii) {d,b} (iv) {d,a} (v) {d,c}

16. Which of the following are true?

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

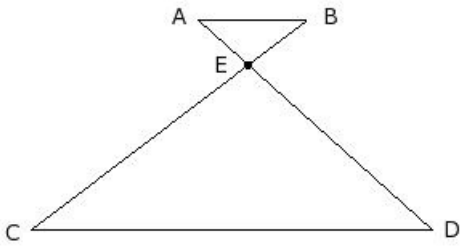
(i) {a,b,c} (ii) {a,d} (iii) {b,c,d} (iv) {a,c} (v) {a,b}

17. In the given two similar triangles, if g = 17 cm, h = 15 cm, i = 20 cm, l = 12 cm, find j



(i) 8.20 cm (ii) 10.20 cm (iii) 11.20 cm (iv) 12.20 cm (v) 9.20 cm

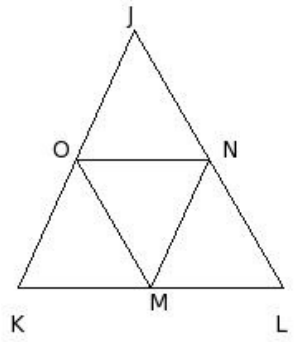
18. In the given figure, if AB ∥ CD then



(i) △EAB ~ △ECD (ii) △ABE ~ △ECD (iii) △ABE ~ △EDC (iv) △EBA ~ △EDC (v) △ABE ~ △DCE

19. In the given figure, points M , N and O are the mid-points of sides KL, LJ and JK of △JKL. Which of the following are true?

a) △NML ~ △JKL
b) △OKM ~ △JKL
c) △MNO ~ △JKL
d) △MON ~ △JKL
e) △JON ~ △JKL



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

Assignment Key

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