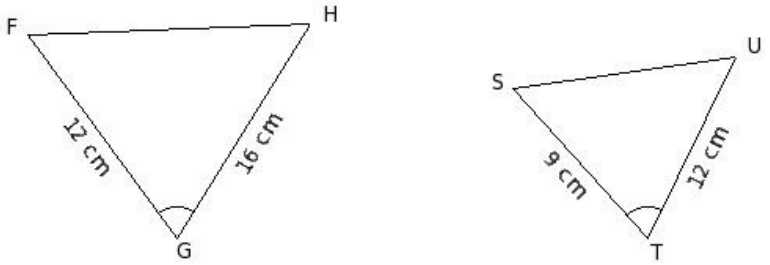
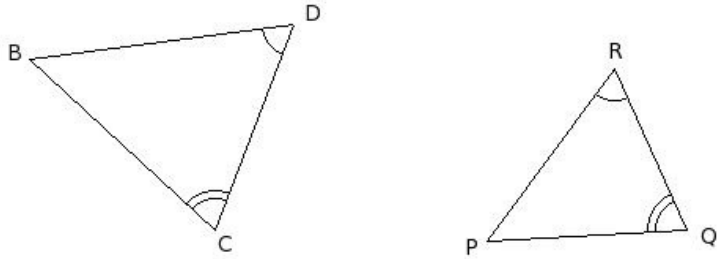
1. Identify the property by which the two given triangles are similar



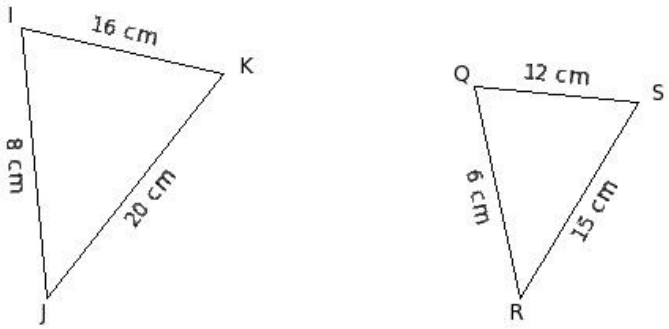
(i) SAS Similarity (ii) SSS Similarity (iii) not similar (iv) AAA Similarity

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



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

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

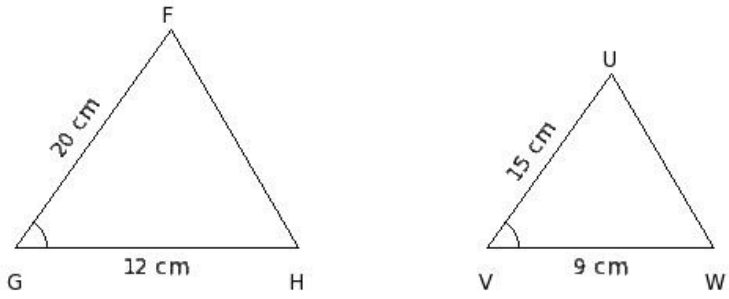


(i) SSS Similarity (ii) not similar (iii) AAA Similarity (iv) SAS Similarity

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

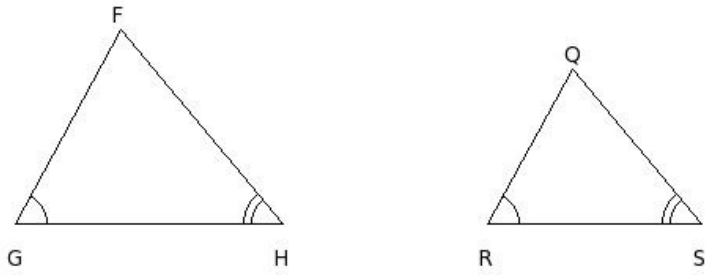
4. $\angle G = \angle V$ and $\frac{FG}{UV} = \frac{GH}{VW}$.

Identify the property by which the two triangles are similar



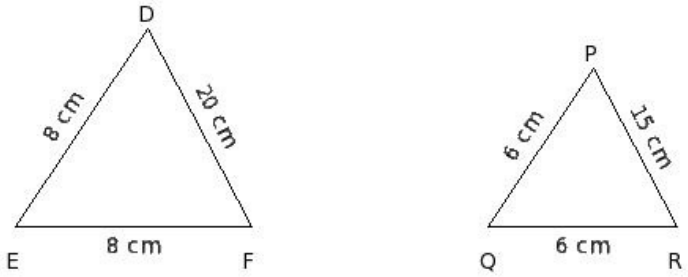
(i) not similar (ii) SAS Similarity (iii) SSS Similarity (iv) AAA Similarity

5. In the given figure, $\triangle FGH$ and $\triangle QRS$ are such that $\angle G = \angle R$ and $\angle H = \angle S$.
Identify the property by which the two triangles are similar



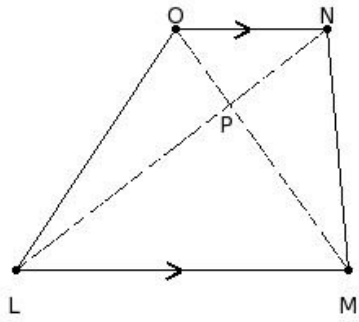
(i) SAS Similarity (ii) not similar (iii) SSS Similarity (iv) AAA Similarity

6. In the given figure, $\triangle DEF$ and $\triangle PQR$ are such that $\frac{DE}{PQ} = \frac{EF}{QR} = \frac{FD}{RP}$.
Identify the property by which the two triangles are similar



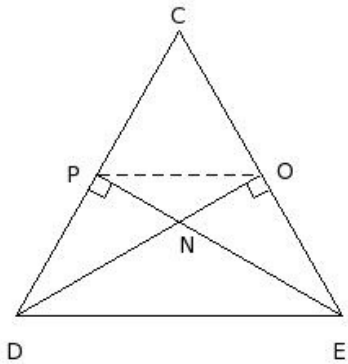
(i) SAS Similarity (ii) AAA Similarity (iii) SSS Similarity (iv) not similar

7. In the given figure, LMNO is a trapezium in which $LM \parallel NO$ and the diagonals MO and LN intersect at P. $\triangle PLM \sim$



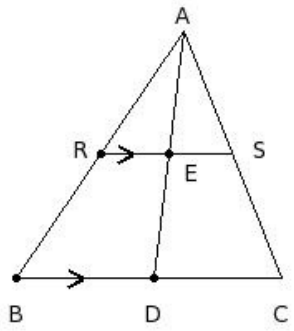
(i) $\triangle PMN$ (ii) $\triangle MNO$ (iii) $\triangle PNO$ (iv) $\triangle POL$ (v) $\triangle OLM$

8. In the given figure, the altitudes OD and EP of $\triangle CDE$ meet at N. $\triangle OED \sim$



(i) $\triangle OEN$ (ii) $\triangle NDE$ (iii) $\triangle NPO$ (iv) $\triangle PDN$ (v) $\triangle PDE$

9. In the given figure, RS ∥ BC , and median AD bisects RS. △ARE ~



(i) △ABD (ii) △BCA (iii) △ABC (iv) △ADC (v) △AES

10. Which of the following are true?

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

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

11. Which of the following are true?

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

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

12. Which of the following are true?

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

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

13. Which of the following are true?

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

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

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

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

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

15. Which of the following are true?

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

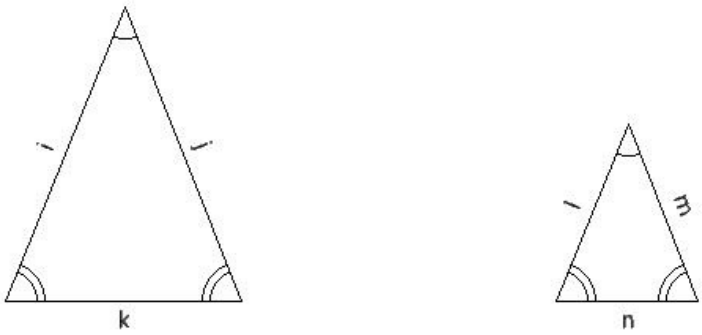
(i) {d,a,b} (ii) {d,b} (iii) {d,c} (iv) {d,a} (v) {a,b,c}

16. Which of the following are true?

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

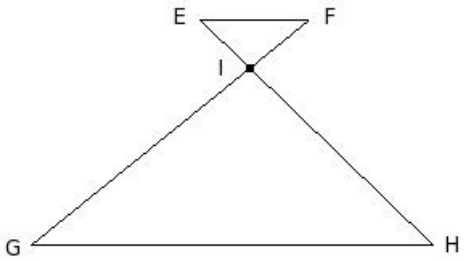
(i) {a,c} (ii) {b,c,d} (iii) {a,d} (iv) {a,b} (v) {a,b,c}

17. In the given two similar triangles, if i = 20 cm, j = 20 cm, k = 15 cm, m = 12 cm, find n



(i) 10.00 cm (ii) 8.00 cm (iii) 7.00 cm (iv) 9.00 cm (v) 11.00 cm

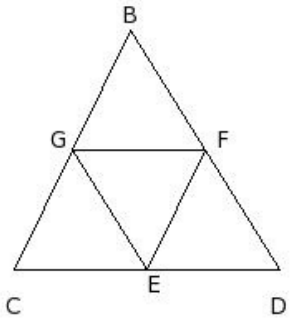
18. In the given figure, if EF ∥ GH then



(i) △EFI ~ △IHG (ii) △IEF ~ △IGH (iii) △EFI ~ △IGH (iv) △EFI ~ △HGI (v) △IFE ~ △IHG

19. In the given figure, points E , F and G are the mid-points of sides CD, DB and BC of △BCD. Which of the following are true?

a) △GCE ~ △BCD
b) △BGF ~ △BCD
c) △FED ~ △BCD
d) △EGF ~ △BCD
e) △EFG ~ △BCD



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

Assignment Key

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