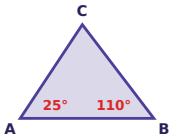
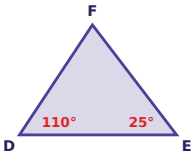
Angle-Angle Similarity & Similar Triangles · 1

Are triangle ABC and triangle DEF similar? Write yes or no.

Triangle ABC



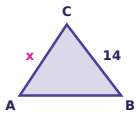
Triangle DEF



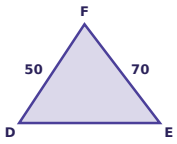
Angle-Angle Similarity & Similar Triangles · 2

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC



Triangle DEF



Angle-Angle Similarity & Similar Triangles · 3

A pole that is 9 feet tall casts a shadow 15 feet long. At the same time, a tree that is 24 feet tall casts a shadow. The two triangles are similar. How many feet long is the shadow of the tree?

Angle-Angle Similarity & Similar Triangles · 4

Triangle ABC is similar to triangle DEF, with A matching D, B matching E and C matching F. Angle C is 45° and angle D is 105°. What is the measure of angle E?

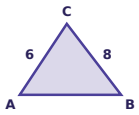
Angle-Angle Similarity & Similar Triangles · 5

One right triangle has an acute angle of 31°. Another right triangle has an acute angle of 61°. Are the two triangles similar? Write yes or no.

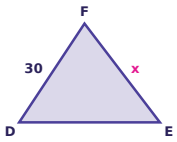
Angle-Angle Similarity & Similar Triangles · 6

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC



Triangle DEF



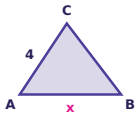
Angle-Angle Similarity & Similar Triangles · 7

A fence post that is 3 feet tall casts a shadow 6 feet long. At the same time, a flagpole casts a shadow 18 feet long. The two triangles are similar. How many feet tall is the flagpole?

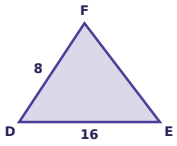
Angle-Angle Similarity & Similar Triangles · 8

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC



Triangle DEF



Angle-Angle Similarity & Similar Triangles · 2

ANSWER

10

Angle-Angle Similarity & Similar Triangles · 1

ANSWER

yes

Angle-Angle Similarity & Similar Triangles · 4

ANSWER

30°

Angle-Angle Similarity & Similar Triangles · 3

ANSWER

40

Angle-Angle Similarity & Similar Triangles · 6

ANSWER

40

Angle-Angle Similarity & Similar Triangles · 5

ANSWER

no

Angle-Angle Similarity & Similar Triangles · 8

ANSWER

8

Angle-Angle Similarity & Similar Triangles · 7

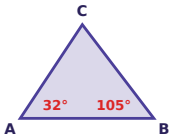
ANSWER

9

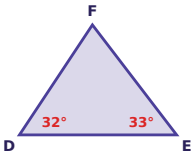
Angle-Angle Similarity & Similar Triangles · 9

Are triangle ABC and triangle DEF similar? Write yes or no.

Triangle ABC



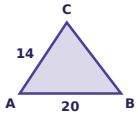
Triangle DEF



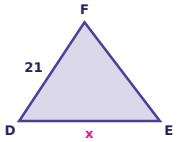
Angle-Angle Similarity & Similar Triangles · 10

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC

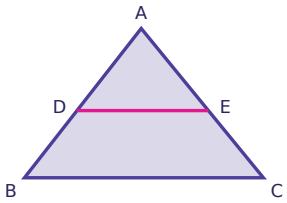


Triangle DEF



Angle-Angle Similarity & Similar Triangles · 11

In triangle ABC, D is on side AB and E is on side AC, and DE is parallel to BC. AD = 10, AB = 16 and BC = 64. Find DE.



Angle-Angle Similarity & Similar Triangles · 12

A fence post that is 8 feet tall casts a shadow 6 feet long. At the same time, a flagpole that is 28 feet tall casts a shadow. The two triangles are similar. How many feet long is the shadow of the flagpole?

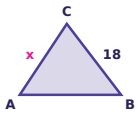
Angle-Angle Similarity & Similar Triangles · 13

One right triangle has an acute angle of 43°. Another right triangle has an acute angle of 47°. Are the two triangles similar? Write yes or no.

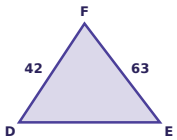
Angle-Angle Similarity & Similar Triangles · 14

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC

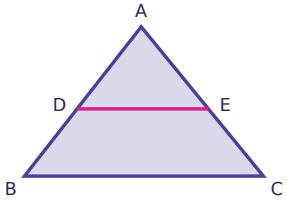


Triangle DEF



Angle-Angle Similarity & Similar Triangles · 15

In triangle ABC, D is on side AB and E is on side AC, and DE is parallel to BC. AD = 6, AB = 14 and DE = 12. Find BC.



Angle-Angle Similarity & Similar Triangles · 16

Triangle ABC is similar to triangle DEF, with A matching D, B matching E and C matching F. Angle A is 70° and angle E is 29°. What is the measure of angle C?

Angle-Angle Similarity & Similar Triangles · 10

ANSWER

30

Angle-Angle Similarity & Similar Triangles · 9

ANSWER

no

Angle-Angle Similarity & Similar Triangles · 12

ANSWER

21

Angle-Angle Similarity & Similar Triangles · 11

ANSWER

40

Angle-Angle Similarity & Similar Triangles · 14

ANSWER

12

Angle-Angle Similarity & Similar Triangles · 13

ANSWER

yes

Angle-Angle Similarity & Similar Triangles · 16

ANSWER

81°

Angle-Angle Similarity & Similar Triangles · 15

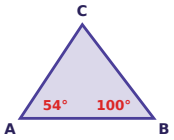
ANSWER

28

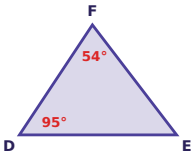
Angle-Angle Similarity & Similar Triangles · 17

Are triangle ABC and triangle DEF similar? Write yes or no.

Triangle ABC



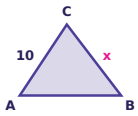
Triangle DEF



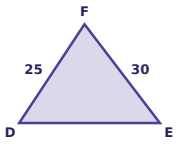
Angle-Angle Similarity & Similar Triangles · 18

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC

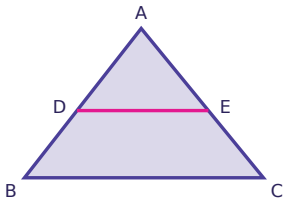


Triangle DEF



Angle-Angle Similarity & Similar Triangles · 19

In triangle ABC, D is on side AB and E is on side AC, and DE is parallel to BC. AD = 5, AB = 20 and DE = 4. Find BC.



Angle-Angle Similarity & Similar Triangles · 20

A signpost that is 9 feet tall casts a shadow 6 feet long. At the same time, a tower casts a shadow 16 feet long. The two triangles are similar. How many feet tall is the tower?

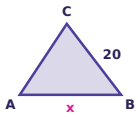
Angle-Angle Similarity & Similar Triangles · 21

One right triangle has an acute angle of 29°. Another right triangle has an acute angle of 71°. Are the two triangles similar? Write yes or no.

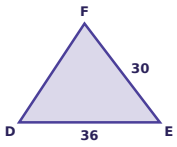
Angle-Angle Similarity & Similar Triangles · 22

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC

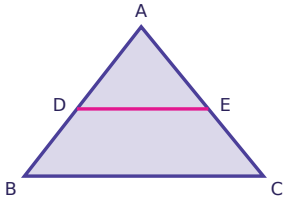


Triangle DEF



Angle-Angle Similarity & Similar Triangles · 23

In triangle ABC, D is on side AB and E is on side AC, and DE is parallel to BC. AD = 18, AB = 30 and BC = 15. Find DE.



Angle-Angle Similarity & Similar Triangles · 24

Triangle ABC is similar to triangle DEF, with A matching D, B matching E and C matching F. Angle C is 50° and angle E is 27°. What is the measure of angle D?

Angle-Angle Similarity & Similar Triangles · 18

ANSWER

12

Angle-Angle Similarity & Similar Triangles · 17

ANSWER

no

Angle-Angle Similarity & Similar Triangles · 20

ANSWER

24

Angle-Angle Similarity & Similar Triangles · 19

ANSWER

16

Angle-Angle Similarity & Similar Triangles · 22

ANSWER

24

Angle-Angle Similarity & Similar Triangles · 21

ANSWER

no

Angle-Angle Similarity & Similar Triangles · 24

ANSWER

103°

Angle-Angle Similarity & Similar Triangles · 23

ANSWER

9