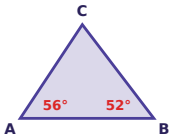
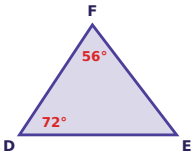
Angle-Angle Similarity & Similar Triangles · 1

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

Triangle ABC



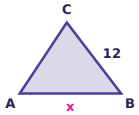
Triangle DEF



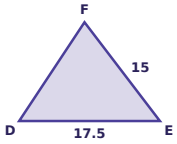
Angle-Angle Similarity & Similar Triangles · 2

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC

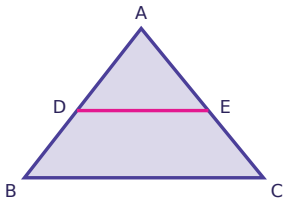


Triangle DEF



Angle-Angle Similarity & Similar Triangles · 3

In triangle ABC, D is on side AB and E is on side AC, and DE is parallel to BC. AD = 30, DB = 18 and DE = 10. Find BC.



Angle-Angle Similarity & Similar Triangles · 4

A fence post that is 8 feet tall casts a shadow 6 feet long. At the same time, a flagpole casts a shadow 15 feet long. The two triangles are similar. How many feet tall is the flagpole?

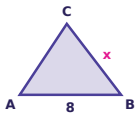
Angle-Angle Similarity & Similar Triangles · 5

One right triangle has an acute angle of 66°. Another right triangle has an acute angle of 24°. Are the two triangles similar? Write yes or no.

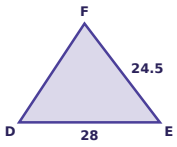
Angle-Angle Similarity & Similar Triangles · 6

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC

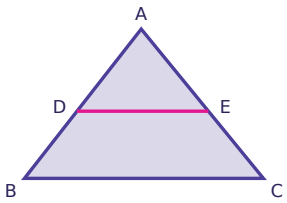


Triangle DEF



Angle-Angle Similarity & Similar Triangles · 7

In triangle ABC, D is on side AB and E is on side AC, and DE is parallel to BC. AD = 8, DB = 4 and DE = 6. Find BC.



Angle-Angle Similarity & Similar Triangles · 8

Triangle ABC is similar to triangle DEF, with A matching D, B matching E and C matching F. Angle C is 69° and angle E is 73°. What is the measure of angle A?

Angle-Angle Similarity & Similar Triangles · 2

ANSWER

14

Angle-Angle Similarity & Similar Triangles · 1

ANSWER

yes

Angle-Angle Similarity & Similar Triangles · 4

ANSWER

20

Angle-Angle Similarity & Similar Triangles · 3

ANSWER

16

Angle-Angle Similarity & Similar Triangles · 6

ANSWER

7

Angle-Angle Similarity & Similar Triangles · 5

ANSWER

yes

Angle-Angle Similarity & Similar Triangles · 8

ANSWER

38°

Angle-Angle Similarity & Similar Triangles · 7

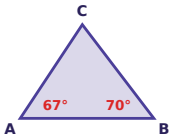
ANSWER

9

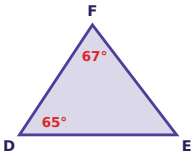
Angle-Angle Similarity & Similar Triangles · 9

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

Triangle ABC



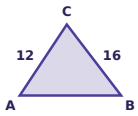
Triangle DEF



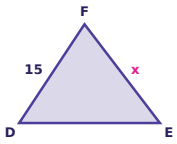
Angle-Angle Similarity & Similar Triangles · 10

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC

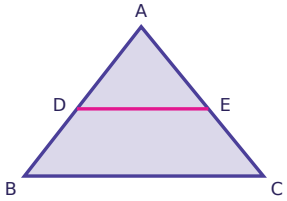


Triangle DEF



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 = 5, DB = 5 and BC = 4. Find DE.



Angle-Angle Similarity & Similar Triangles · 12

A pole that is 4 feet tall casts a shadow 6 feet long. At the same time, a tree casts a shadow 21 feet long. The two triangles are similar. How many feet tall is the tree?

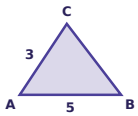
Angle-Angle Similarity & Similar Triangles · 13

One right triangle has an acute angle of 30°. Another right triangle has an acute angle of 60°. Are the two triangles similar? Write yes or no.

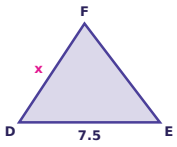
Angle-Angle Similarity & Similar Triangles · 14

Triangle ABC is similar to triangle DEF. Find x.

Triangle ABC

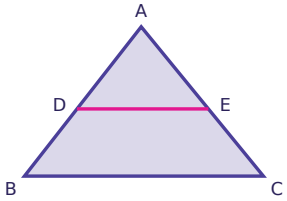


Triangle DEF



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 = 15, DB = 9 and DE = 45. 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 C is 27° and angle D is 63°. What is the measure of angle B?

Angle-Angle Similarity & Similar Triangles · 10

ANSWER

20

Angle-Angle Similarity & Similar Triangles · 9

ANSWER

no

Angle-Angle Similarity & Similar Triangles · 12

ANSWER

14

Angle-Angle Similarity & Similar Triangles · 11

ANSWER

2

Angle-Angle Similarity & Similar Triangles · 14

ANSWER

4.5

Angle-Angle Similarity & Similar Triangles · 13

ANSWER

yes

Angle-Angle Similarity & Similar Triangles · 16

ANSWER

90°

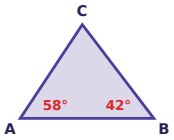
Angle-Angle Similarity & Similar Triangles · 15

ANSWER

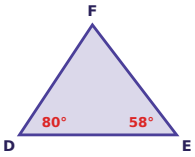
72

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

Triangle ABC

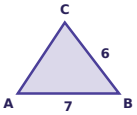


Triangle DEF

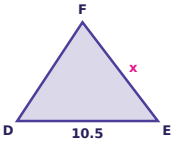


Triangle ABC is similar to triangle DEF. Find x.

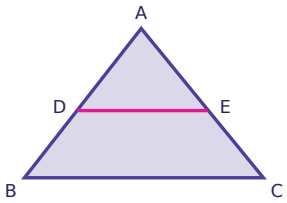
Triangle ABC



Triangle DEF



In triangle ABC, D is on side AB and E is on side AC, and DE is parallel to BC. AD = 12, DB = 18 and BC = 50. Find DE.

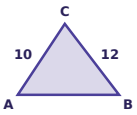


A street sign that is 10 feet tall casts a shadow 8 feet long. At the same time, a building that is 35 feet tall casts a shadow. The two triangles are similar. How many feet long is the shadow of the building?

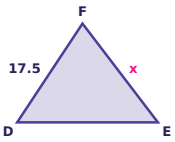
One right triangle has an acute angle of 53°. Another right triangle has an acute angle of 42°. Are the two triangles similar? Write yes or no.

Triangle ABC is similar to triangle DEF. Find x.

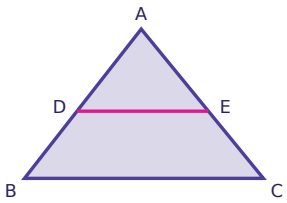
Triangle ABC



Triangle DEF



In triangle ABC, D is on side AB and E is on side AC, and DE is parallel to BC. AD = 2, DB = 2 and BC = 6. Find DE.



Triangle ABC is similar to triangle DEF, with A matching D, B matching E and C matching F. Angle B is 55° and angle F is 27°. What is the measure of angle A?

Angle-Angle Similarity & Similar Triangles · 18

ANSWER

9

Angle-Angle Similarity & Similar Triangles · 17

ANSWER

yes

Angle-Angle Similarity & Similar Triangles · 20

ANSWER

28

Angle-Angle Similarity & Similar Triangles · 19

ANSWER

20

Angle-Angle Similarity & Similar Triangles · 22

ANSWER

21

Angle-Angle Similarity & Similar Triangles · 21

ANSWER

no

Angle-Angle Similarity & Similar Triangles · 24

ANSWER

98°

Angle-Angle Similarity & Similar Triangles · 23

ANSWER

3