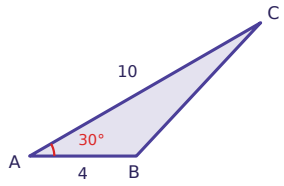
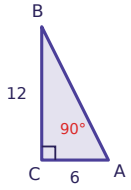
Area of a Triangle with Trigonometry · 1

In △ABC, AB = 4, AC = 10 and m∠A = 30°. Find the area of △ABC.



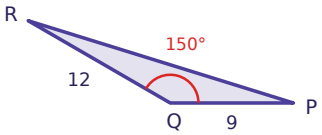
Area of a Triangle with Trigonometry · 2

In △ABC, AC = 6, BC = 12 and m∠C = 90°. Find the area of △ABC.



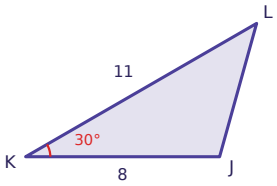
Area of a Triangle with Trigonometry · 3

In △PQR, PQ = 9, QR = 12 and m∠Q = 150°. Find the area of △PQR.



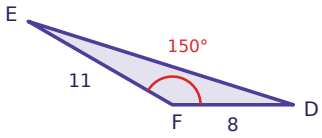
Area of a Triangle with Trigonometry · 4

In △JKL, JK = 8, KL = 11 and m∠K = 30°. Find the area of △JKL.



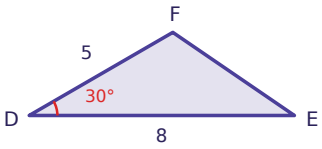
Area of a Triangle with Trigonometry · 5

In △DEF, DF = 8, EF = 11 and m∠F = 150°. Find the area of △DEF.



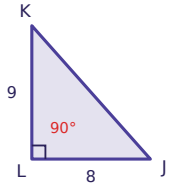
Area of a Triangle with Trigonometry · 6

In △DEF, DE = 8, DF = 5 and m∠D = 30°. Find the area of △DEF.



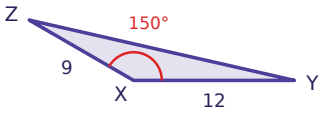
Area of a Triangle with Trigonometry · 7

In △JKL, JL = 8, KL = 9 and m∠L = 90°. Find the area of △JKL.



Area of a Triangle with Trigonometry · 8

In △XYZ, XY = 12, XZ = 9 and m∠X = 150°. Find the area of △XYZ.



Area of a Triangle with Trigonometry · 2

ANSWER

36

Area of a Triangle with Trigonometry · 1

ANSWER

10

Area of a Triangle with Trigonometry · 4

ANSWER

22

Area of a Triangle with Trigonometry · 3

ANSWER

27

Area of a Triangle with Trigonometry · 6

ANSWER

10

Area of a Triangle with Trigonometry · 5

ANSWER

22

Area of a Triangle with Trigonometry · 8

ANSWER

27

Area of a Triangle with Trigonometry · 7

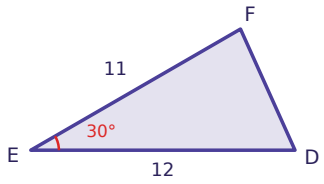
ANSWER

36

Area of a Triangle with Trigonometry · 9

In △DEF, DE = 12, EF = 11 and m∠E = 30°.

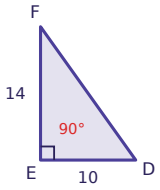
Find the area of △DEF.



Area of a Triangle with Trigonometry · 10

In △DEF, DE = 10, EF = 14 and m∠E = 90°.

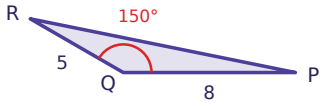
Find the area of △DEF.



Area of a Triangle with Trigonometry · 11

In △PQR, PQ = 8, QR = 5 and m∠Q = 150°.

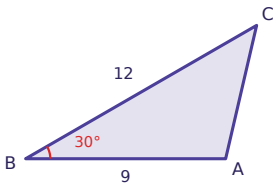
Find the area of △PQR.



Area of a Triangle with Trigonometry · 12

In △ABC, AB = 9, BC = 12 and m∠B = 30°.

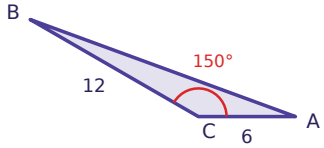
Find the area of △ABC.



Area of a Triangle with Trigonometry · 13

In △ABC, AC = 6, BC = 12 and m∠C = 150°.

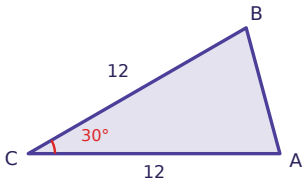
Find the area of △ABC.



Area of a Triangle with Trigonometry · 14

In △ABC, AC = 12, BC = 12 and m∠C = 30°.

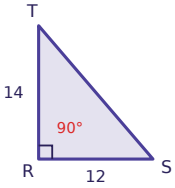
Find the area of △ABC.



Area of a Triangle with Trigonometry · 15

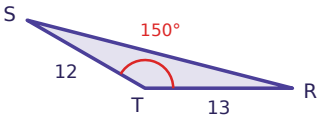
In △RST, RS = 12, RT = 14 and m∠R = 90°.

Find the area of △RST.



Area of a Triangle with Trigonometry · 16

In △RST, RT = 13, ST = 12 and m∠T = 150°. Find the area of △RST.



Area of a Triangle with Trigonometry · 10

ANSWER

70

Area of a Triangle with Trigonometry · 9

ANSWER

33

Area of a Triangle with Trigonometry · 12

ANSWER

27

Area of a Triangle with Trigonometry · 11

ANSWER

10

Area of a Triangle with Trigonometry · 14

ANSWER

36

Area of a Triangle with Trigonometry · 13

ANSWER

18

Area of a Triangle with Trigonometry · 16

ANSWER

39

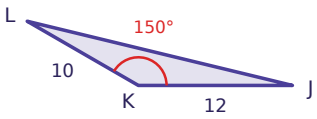
Area of a Triangle with Trigonometry · 15

ANSWER

84

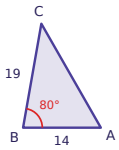
Area of a Triangle with Trigonometry · 17

In △JKL, JK = 12, KL = 10 and m∠K = 150°. Find the area of △JKL.



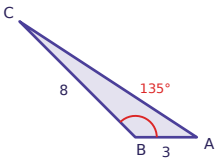
Area of a Triangle with Trigonometry · 18

In △ABC, AB = 14, BC = 19 and m∠B = 80°. Find the area of △ABC. Round to the nearest tenth.



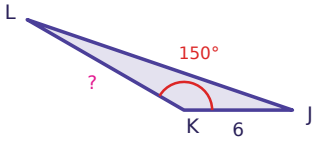
Area of a Triangle with Trigonometry · 19

In △ABC, AB = 3, BC = 8 and m∠B = 135°. Find the area of △ABC. Leave your answer in simplest radical form.



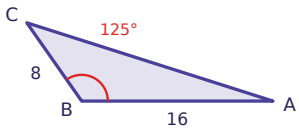
Area of a Triangle with Trigonometry · 20

The area of △JKL is 15. JK = 6 and m∠K = 150°. Find KL.



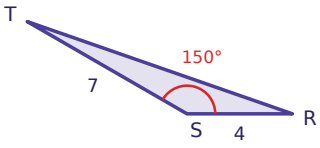
Area of a Triangle with Trigonometry · 21

In △ABC, AB = 16, BC = 8 and m∠B = 125°. Find the area of △ABC. Round to the nearest tenth.



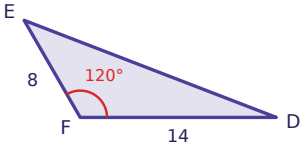
Area of a Triangle with Trigonometry · 22

In △RST, RS = 4, ST = 7 and m∠S = 150°. Find the area of △RST.



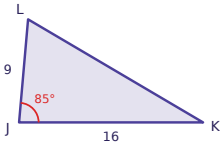
Area of a Triangle with Trigonometry · 23

In △DEF, DF = 14, EF = 8 and m∠F = 120°. Find the area of △DEF. Leave your answer in simplest radical form.



Area of a Triangle with Trigonometry · 24

In △JKL, JK = 16, JL = 9 and m∠J = 85°. Find the area of △JKL. Round to the nearest tenth.



Area of a Triangle with Trigonometry · 18

ANSWER

131.0

Area of a Triangle with Trigonometry · 17

ANSWER

30

Area of a Triangle with Trigonometry · 20

ANSWER

10

Area of a Triangle with Trigonometry · 19

ANSWER

$6\sqrt{2}$

Area of a Triangle with Trigonometry · 22

ANSWER

7

Area of a Triangle with Trigonometry · 21

ANSWER

52.4

Area of a Triangle with Trigonometry · 24

ANSWER

71.7

Area of a Triangle with Trigonometry · 23

ANSWER

$28\sqrt{3}$