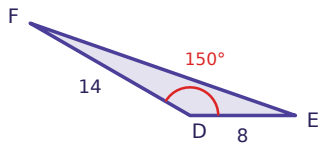
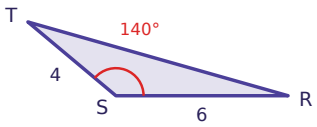
Area of a Triangle with Trigonometry · 1

In △DEF, DE = 8, DF = 14 and m∠D = 150°. Find the area of △DEF.



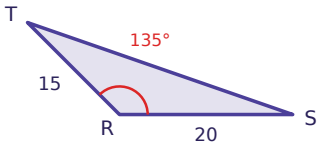
Area of a Triangle with Trigonometry · 2

In △RST, RS = 6, ST = 4 and m∠S = 140°. Find the area of △RST. Round to the nearest tenth.



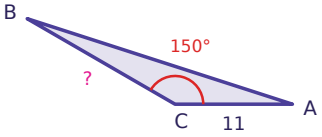
Area of a Triangle with Trigonometry · 3

In △RST, RS = 20, RT = 15 and m∠R = 135°. Find the area of △RST. Leave your answer in simplest radical form.



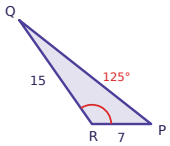
Area of a Triangle with Trigonometry · 4

The area of △ABC is 44. AC = 11 and m∠C = 150°. Find BC.



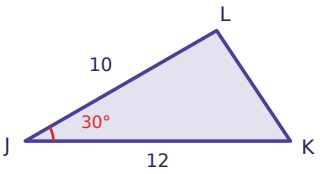
Area of a Triangle with Trigonometry · 5

In △PQR, PR = 7, QR = 15 and m∠R = 125°. Find the area of △PQR. Round to the nearest tenth.



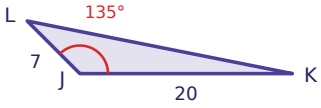
Area of a Triangle with Trigonometry · 6

In △JKL, JK = 12, JL = 10 and m∠J = 30°. Find the area of △JKL.



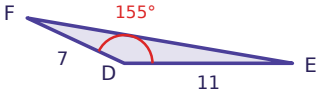
Area of a Triangle with Trigonometry · 7

In △JKL, JK = 20, JL = 7 and m∠J = 135°. Find the area of △JKL. Leave your answer in simplest radical form.



Area of a Triangle with Trigonometry · 8

In △DEF, DE = 11, DF = 7 and m∠D = 155°. Find the area of △DEF. Round to the nearest tenth.



Area of a Triangle with Trigonometry · 2

ANSWER

7.7

Area of a Triangle with Trigonometry · 1

ANSWER

28

Area of a Triangle with Trigonometry · 4

ANSWER

16

Area of a Triangle with Trigonometry · 3

ANSWER

$75\sqrt{2}$

Area of a Triangle with Trigonometry · 6

ANSWER

30

Area of a Triangle with Trigonometry · 5

ANSWER

43.0

Area of a Triangle with Trigonometry · 8

ANSWER

16.3

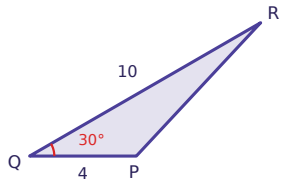
Area of a Triangle with Trigonometry · 7

ANSWER

$35\sqrt{2}$

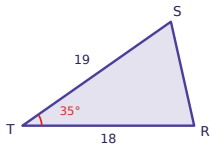
Area of a Triangle with Trigonometry · 9

In △PQR, PQ = 4, QR = 10 and m∠Q = 30°. Find the area of △PQR.



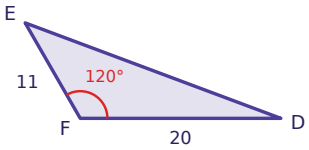
Area of a Triangle with Trigonometry · 10

In △RST, RT = 18, ST = 19 and m∠T = 35°. Find the area of △RST. Round to the nearest tenth.



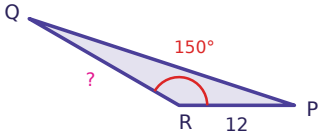
Area of a Triangle with Trigonometry · 11

In △DEF, DF = 20, EF = 11 and m∠F = 120°. Find the area of △DEF. Leave your answer in simplest radical form.



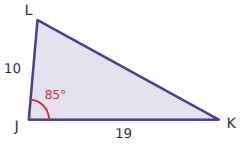
Area of a Triangle with Trigonometry · 12

The area of △PQR is 54. PR = 12 and m∠R = 150°. Find QR.



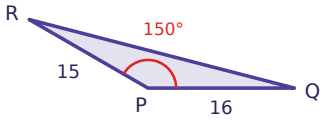
Area of a Triangle with Trigonometry · 13

In △JKL, JK = 19, JL = 10 and m∠J = 85°. Find the area of △JKL. Round to the nearest tenth.



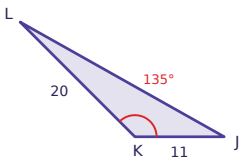
Area of a Triangle with Trigonometry · 14

In △PQR, PQ = 16, PR = 15 and m∠P = 150°. Find the area of △PQR.



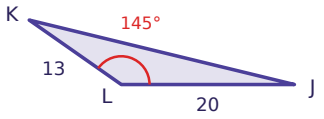
Area of a Triangle with Trigonometry · 15

In △JKL, JK = 11, KL = 20 and m∠K = 135°. Find the area of △JKL. Leave your answer in simplest radical form.



Area of a Triangle with Trigonometry · 16

In △JKL, JL = 20, KL = 13 and m∠L = 145°. Find the area of △JKL. Round to the nearest tenth.



Area of a Triangle with Trigonometry · 10

ANSWER

98.1

Area of a Triangle with Trigonometry · 9

ANSWER

10

Area of a Triangle with Trigonometry · 12

ANSWER

18

Area of a Triangle with Trigonometry · 11

ANSWER

$55\sqrt{3}$

Area of a Triangle with Trigonometry · 14

ANSWER

60

Area of a Triangle with Trigonometry · 13

ANSWER

94.6

Area of a Triangle with Trigonometry · 16

ANSWER

74.6

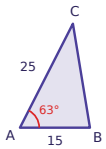
Area of a Triangle with Trigonometry · 15

ANSWER

$55\sqrt{2}$

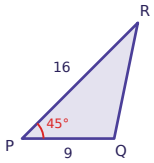
Area of a Triangle with Trigonometry · 17

In △ABC, AB = 15, AC = 25 and m∠A = 63°. Find the area of △ABC. Round to the nearest tenth.



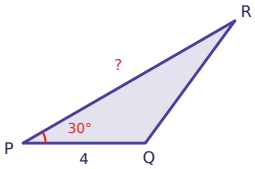
Area of a Triangle with Trigonometry · 18

In △PQR, PQ = 9, PR = 16 and m∠P = 45°. Find the area of △PQR. Leave your answer in simplest radical form.



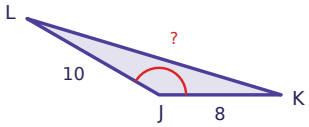
Area of a Triangle with Trigonometry · 19

The area of △PQR is 8. PQ = 4 and m∠P = 30°. Find PR.



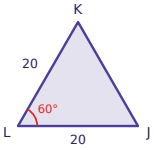
Area of a Triangle with Trigonometry · 20

The area of △JKL is 20. JK = 8, JL = 10 and ∠J is obtuse. Find m∠J.



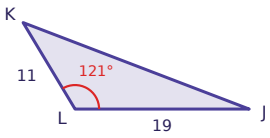
Area of a Triangle with Trigonometry · 21

△JKL is equilateral with side length 20. Find its area. Leave your answer in simplest radical form.



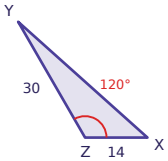
Area of a Triangle with Trigonometry · 22

In △JKL, JL = 19, KL = 11 and m∠L = 121°. Find the area of △JKL. Round to the nearest tenth.



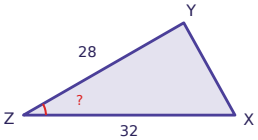
Area of a Triangle with Trigonometry · 23

In △XYZ, XZ = 14, YZ = 30 and m∠Z = 120°. Find the area of △XYZ. Leave your answer in simplest radical form.



Area of a Triangle with Trigonometry · 24

The area of △XYZ is 224. XZ = 32, YZ = 28 and ∠Z is acute. Find m∠Z.



Area of a Triangle with Trigonometry · 18

ANSWER

$36\sqrt{2}$

Area of a Triangle with Trigonometry · 17

ANSWER

167.1

Area of a Triangle with Trigonometry · 20

ANSWER

$150°$

Area of a Triangle with Trigonometry · 19

ANSWER

8

Area of a Triangle with Trigonometry · 22

ANSWER

89.6

Area of a Triangle with Trigonometry · 21

ANSWER

$100\sqrt{3}$

Area of a Triangle with Trigonometry · 24

ANSWER

$30°$

Area of a Triangle with Trigonometry · 23

ANSWER

$105\sqrt{3}$