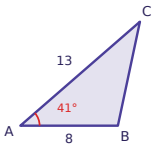
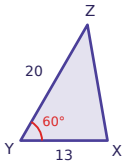
Area of a Triangle with Trigonometry · 1

In △ABC, AB = 8, AC = 13 and m∠A = 41°. Find the area of △ABC. Round to the nearest tenth.



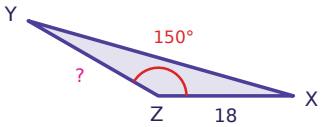
Area of a Triangle with Trigonometry · 2

In △XYZ, XY = 13, YZ = 20 and m∠Y = 60°. Find the area of △XYZ. Leave your answer in simplest radical form.



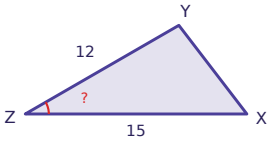
Area of a Triangle with Trigonometry · 3

The area of △XYZ is 90. XZ = 18 and m∠Z = 150°. Find YZ.



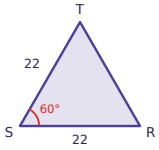
Area of a Triangle with Trigonometry · 4

The area of △XYZ is 45. XZ = 15, YZ = 12 and ∠Z is acute. Find m∠Z.



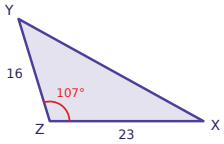
Area of a Triangle with Trigonometry · 5

△RST is equilateral with side length 22. Find its area. Leave your answer in simplest radical form.



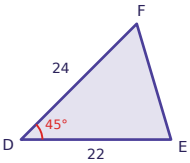
Area of a Triangle with Trigonometry · 6

In △XYZ, XZ = 23, YZ = 16 and m∠Z = 107°. Find the area of △XYZ. Round to the nearest tenth.



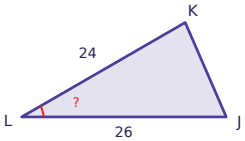
Area of a Triangle with Trigonometry · 7

In △DEF, DE = 22, DF = 24 and m∠D = 45°. Find the area of △DEF. Leave your answer in simplest radical form.



Area of a Triangle with Trigonometry · 8

The area of △JKL is 156. JL = 26, KL = 24 and ∠L is acute. Find m∠L.



Area of a Triangle with Trigonometry · 2

ANSWER

$65\sqrt{3}$

Area of a Triangle with Trigonometry · 1

ANSWER

34.1

Area of a Triangle with Trigonometry · 4

ANSWER

30°

Area of a Triangle with Trigonometry · 3

ANSWER

20

Area of a Triangle with Trigonometry · 6

ANSWER

176.0

Area of a Triangle with Trigonometry · 5

ANSWER

$121\sqrt{3}$

Area of a Triangle with Trigonometry · 8

ANSWER

30°

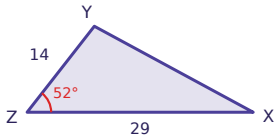
Area of a Triangle with Trigonometry · 7

ANSWER

$132\sqrt{2}$

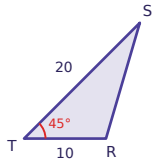
Area of a Triangle with Trigonometry · 9

In △XYZ, XZ = 29, YZ = 14 and m∠Z = 52°. Find the area of △XYZ. Round to the nearest tenth.



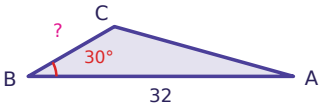
Area of a Triangle with Trigonometry · 10

In △RST, RT = 10, ST = 20 and m∠T = 45°. Find the area of △RST. Leave your answer in simplest radical form.



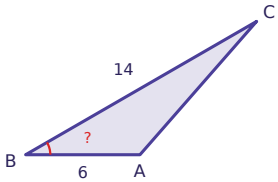
Area of a Triangle with Trigonometry · 11

The area of △ABC is 96. AB = 32 and m∠B = 30°. Find BC.



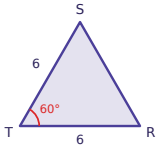
Area of a Triangle with Trigonometry · 12

The area of △ABC is 21. AB = 6, BC = 14 and ∠B is acute. Find m∠B.



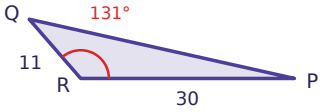
Area of a Triangle with Trigonometry · 13

△RST is equilateral with side length 6. Find its area. Leave your answer in simplest radical form.



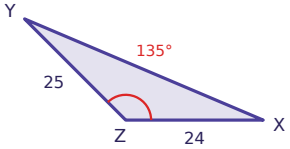
Area of a Triangle with Trigonometry · 14

In △PQR, PR = 30, QR = 11 and m∠R = 131°. Find the area of △PQR. Round to the nearest tenth.



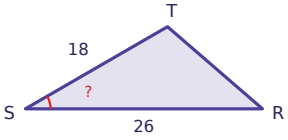
Area of a Triangle with Trigonometry · 15

In △XYZ, XZ = 24, YZ = 25 and m∠Z = 135°. Find the area of △XYZ. Leave your answer in simplest radical form.



Area of a Triangle with Trigonometry · 16

The area of △RST is 117. RS = 26, ST = 18 and ∠S is acute. Find m∠S.



Area of a Triangle with Trigonometry · 10

ANSWER

$50\sqrt{2}$

Area of a Triangle with Trigonometry · 9

ANSWER

160.0

Area of a Triangle with Trigonometry · 12

ANSWER

30°

Area of a Triangle with Trigonometry · 11

ANSWER

12

Area of a Triangle with Trigonometry · 14

ANSWER

124.5

Area of a Triangle with Trigonometry · 13

ANSWER

$9\sqrt{3}$

Area of a Triangle with Trigonometry · 16

ANSWER

30°

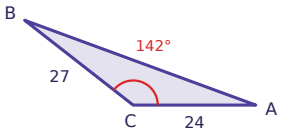
Area of a Triangle with Trigonometry · 15

ANSWER

$150\sqrt{2}$

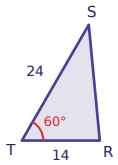
Area of a Triangle with Trigonometry · 17

In △ABC, AC = 24, BC = 27 and m∠C = 142°. Find the area of △ABC. Round to the nearest tenth.



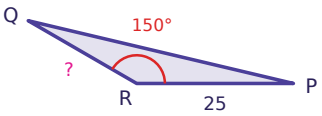
Area of a Triangle with Trigonometry · 18

In △RST, RT = 14, ST = 24 and m∠T = 60°. Find the area of △RST. Leave your answer in simplest radical form.



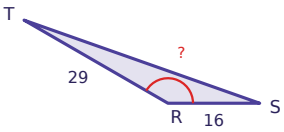
Area of a Triangle with Trigonometry · 19

The area of △PQR is 125. PR = 25 and m∠R = 150°. Find QR.



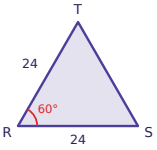
Area of a Triangle with Trigonometry · 20

The area of △RST is 116. RS = 16, RT = 29 and ∠R is obtuse. Find m∠R.



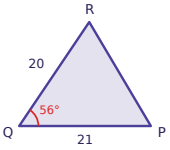
Area of a Triangle with Trigonometry · 21

△RST is equilateral with side length 24. Find its area. Leave your answer in simplest radical form.



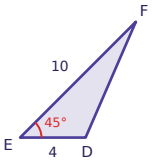
Area of a Triangle with Trigonometry · 22

In △PQR, PQ = 21, QR = 20 and m∠Q = 56°. Find the area of △PQR. Round to the nearest tenth.



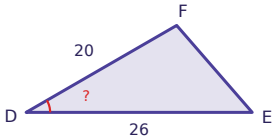
Area of a Triangle with Trigonometry · 23

In △DEF, DE = 4, EF = 10 and m∠E = 45°. Find the area of △DEF. Leave your answer in simplest radical form.



Area of a Triangle with Trigonometry · 24

The area of △DEF is 130. DE = 26, DF = 20 and ∠D is acute. Find m∠D.



Area of a Triangle with Trigonometry · 18

ANSWER

$84\sqrt{3}$

Area of a Triangle with Trigonometry · 17

ANSWER

199.5

Area of a Triangle with Trigonometry · 20

ANSWER

$150°$

Area of a Triangle with Trigonometry · 19

ANSWER

20

Area of a Triangle with Trigonometry · 22

ANSWER

174.1

Area of a Triangle with Trigonometry · 21

ANSWER

$144\sqrt{3}$

Area of a Triangle with Trigonometry · 24

ANSWER

$30°$

Area of a Triangle with Trigonometry · 23

ANSWER

$10\sqrt{2}$