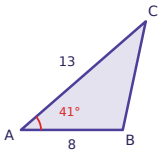
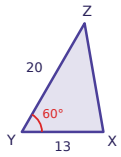
Task card 1 Area of a Triangle with Trigonomet...

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



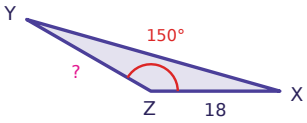
Task card 2 Area of a Triangle with Trigonomet...

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



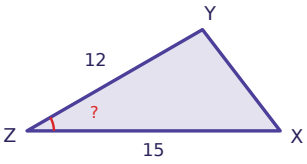
Task card 3 Area of a Triangle with Trigonomet...

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



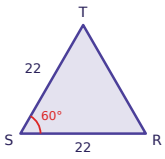
Task card 4 Area of a Triangle with Trigonomet...

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



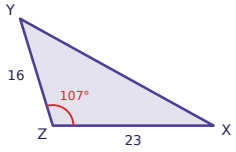
Task card 5 Area of a Triangle with Trigonomet...

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



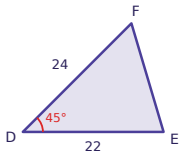
Task card 6 Area of a Triangle with Trigonomet...

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



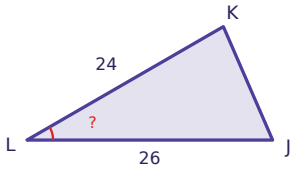
Task card 7 Area of a Triangle with Trigonomet...

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



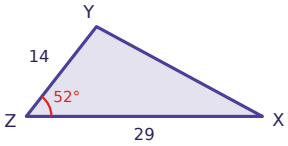
Task card 8 Area of a Triangle with Trigonomet...

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



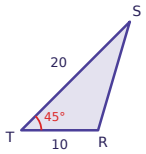
Task card 9 Area of a Triangle with Trigonomet...

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



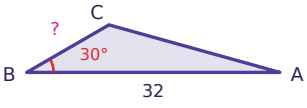
Task card 10 Area of a Triangle with Trigonomet...

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



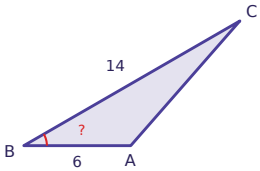
Task card 11 Area of a Triangle with Trigonomet...

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



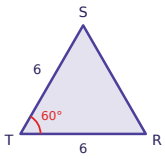
Task card 12 Area of a Triangle with Trigonomet...

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



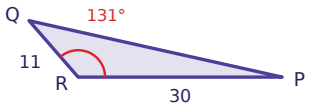
Task card 13 Area of a Triangle with Trigonomet...

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



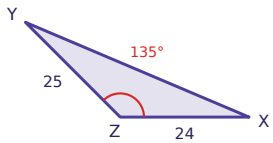
Task card 14 Area of a Triangle with Trigonomet...

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



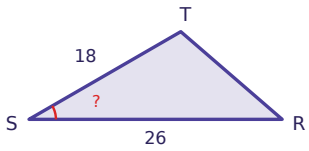
Task card 15 Area of a Triangle with Trigonomet...

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



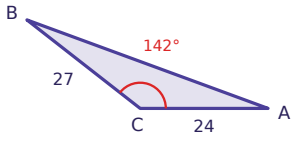
Task card 16 Area of a Triangle with Trigonomet...

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



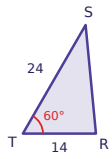
Task card 17 Area of a Triangle with Trigonomet...

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



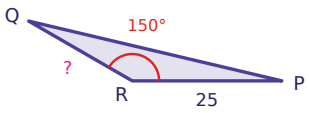
Task card 18 Area of a Triangle with Trigonomet...

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



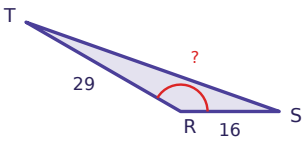
Task card 19 Area of a Triangle with Trigonomet...

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



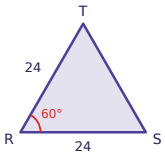
Task card 20 Area of a Triangle with Trigonomet...

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



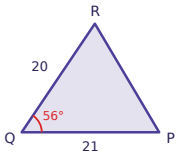
Task card 21 Area of a Triangle with Trigonomet...

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



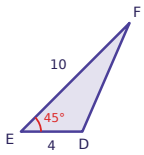
Task card 22 Area of a Triangle with Trigonomet...

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



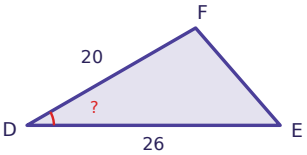
Task card 23 Area of a Triangle with Trigonomet...

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



Task card 24 Area of a Triangle with Trigonomet...

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



Area of a Triangle with Trigonometry Task Cards

Recording sheet · Grade 10 · Use Area = 1/2 · a · b · sin C, where C is the angle between sides a and b. Give exact answers unless the question says to round.

Scan to check your answers

Name: _____ Date: _____

1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20
21	22	23	24

Area of a Triangle with Trigonometry Task Cards: Answer Key

Grade 10 · Hard

The answers online

1. 34.1	**2.** 65√3	**3.** 20
4. 30°	**5.** 121√3	**6.** 176.0
7. 132√2	**8.** 30°	**9.** 160.0
10. 50√2	**11.** 12	**12.** 30°
13. 9√3	**14.** 124.5	**15.** 150√2
16. 30°	**17.** 199.5	**18.** 84√3
19. 20	**20.** 150°	**21.** 144√3
22. 174.1	**23.** 10√2	**24.** 30°