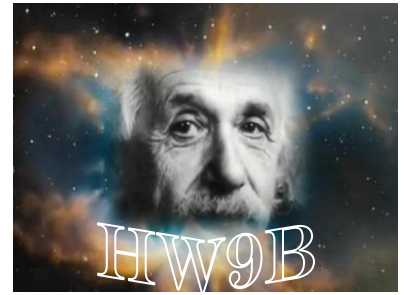


For 1 – 4, give areas and lengths to three significant digits. Give angle measures to the nearest tenth of a degree.



Find the area of $\triangle ABC$

1a) $a = 4, b = 5, \angle C = 30^\circ$

b) $a = 4, b = 5, \angle C = 150^\circ$

2a) $b = 3, c = 8, \angle A = 120^\circ$

b) $b = 3, c = 8, \angle A = 60^\circ$

3a) $a = 6, c = 2, \angle A = 35^\circ, \angle C = 100^\circ$

b) $a = 6, c = 2, \angle A = 15^\circ, \angle C = 30^\circ$

4a) $a = 10, b = 20, \angle A = 82^\circ, \angle B = 28^\circ$

b) $a = 10, b = 20, \angle C = 110^\circ$

5) What does the formula $K = \frac{1}{2}ab \sin C$ become when $\angle C$ is a right angle. A sketch may help.

Find the missing measurement. Give areas and lengths to three significant digits. Give angle measures to the nearest tenth of a degree.

6) Find the area of $\triangle XYZ$ if $x = 16, y = 25$, and $\angle Z = 52^\circ$

7) Find the area of $\triangle RST$ if $\angle S = 125^\circ, r = 6, t = 15$.

8) The area of $\triangle ABC$ is 15. If $a = 12, b = 5$, find all possible measures for $\angle C$.

9) The area of $\triangle PQR$ is 9. If $q = 4, r = 9$, find all possible measures for $\angle P$.

10) Adjacent sides of a parallelogram have lengths of 6cm and 7cm, and the measure of the included angle is 30° . Find the area of the parallelogram.

1a) 5	3a) 4.24	5) $K = 1/2bh$	9) 30° or 150°
1b) 5	3b) 4.24	6) 158	10) 21cm^2
2a) 10.4	4a) 94.0	7) 36.9	
2b) 10.4	4b) 94.0	8) 30° or 150°	