$\qquad$ Date: $\qquad$

## COLOR BY CODES law of sines

 answers.

Find the missing sides and angles in the triangle given below.


1. Angle $A=$ $\qquad$ (RED)
2. Angle $B=$ $\qquad$ (GREEN)
3. Side length $\mathrm{b}=$ $\qquad$ (YELLOW)

Find the missing sides, angles and the Area of the triangle given below.

4. Angle $M=$ $\qquad$ (RED)
5. Angle $N=$ $\qquad$ (DARK BROWN)
6. Side length $\mathrm{n}=$ $\qquad$ m (LIGHT BLUE)
7. Area $=$ $\qquad$ $\mathrm{m}^{2}$ (LIGHT BROWN)
8. In a triangle $P Q R$, angle $P=45^{\circ}, P Q=5 m$, angle $R=60^{\circ}$. What is the length of the side $Q R$ ? (PURPLE)

Length of side QR = $\qquad$ m
9. In a triangle $A B C$, angle $B=60^{\circ}, A C=10 \mathrm{~m}, A B=9 \mathrm{~m}$. What is the measure of angle $C$ ? (LIGHT GREEN)

Measure of angle $\mathrm{C}=$ $\qquad$
10. Find the area of the triangle given below. (LIGHT BLUE)


Area $=$ $\qquad$ $\mathrm{m}^{2}$
11. Find the area of the triangle given below. (ORANGE)


Area $=$ $\qquad$ $\mathrm{m}^{2}$
12. In a triangle $A B C, A B=8, A C=6$ and angle $A=60^{\circ}$. What is the area of this triangle? (PINK) Area $=$ $\qquad$


## Answers:

1. $35.3^{\circ}$
2. $84.7^{\circ}$
3. 13.8
4. $48.6^{\circ}$
5. $101.4^{\circ}$
6. 7.84
7. 11.76
8. 4.1
9. $51.2^{\circ}$
10.34.64
11.1.5
12.20.78
