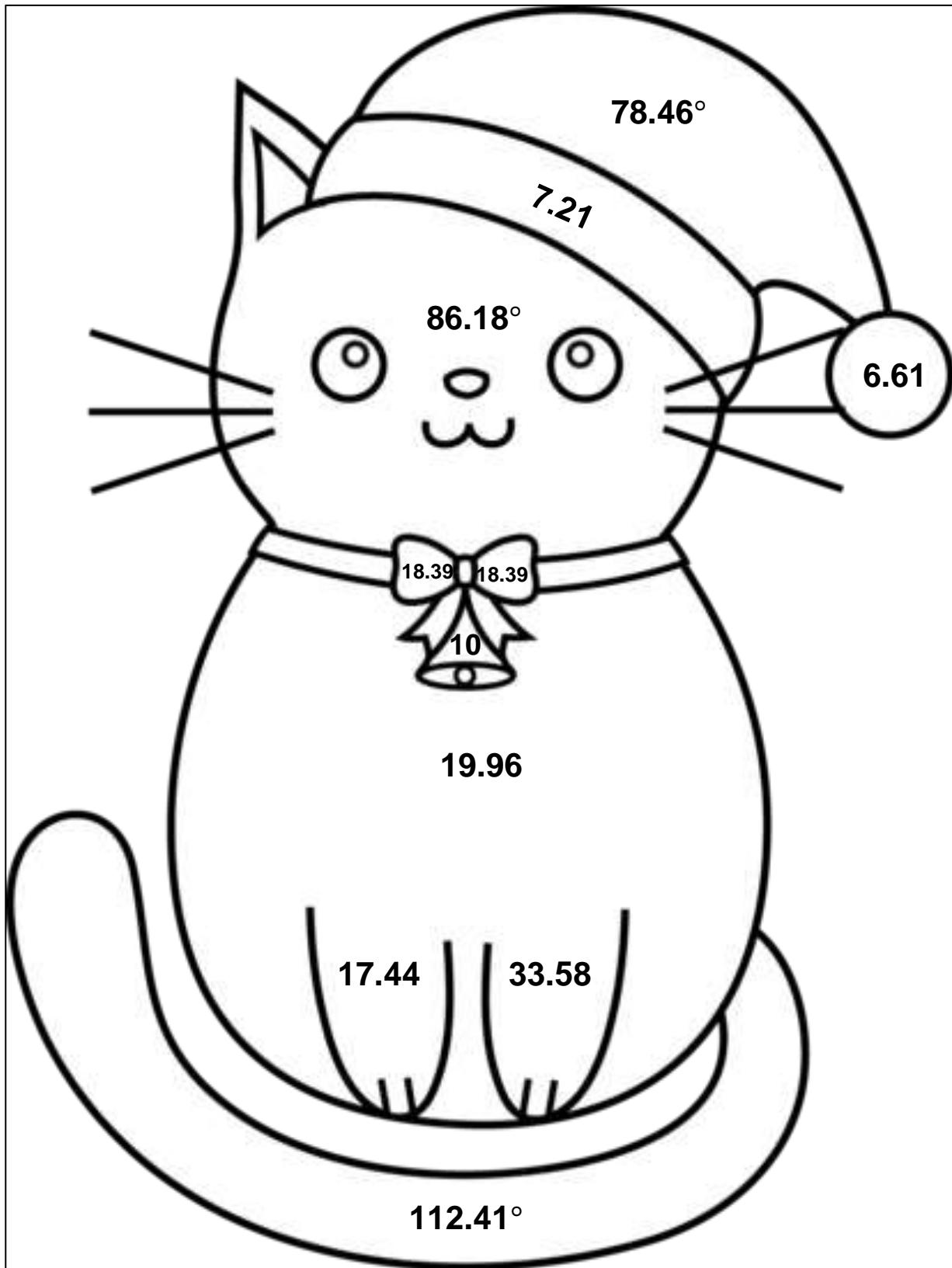


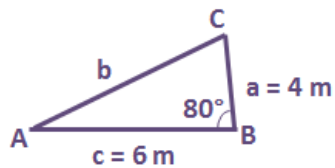
Name: _____ Period: _____ Date: _____

COLOR BY CODES LAW OF COSINES



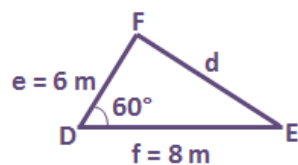
Answer the questions. Color the "Christmas Cat" according to your answers.

1. Find the missing side in the triangle given below. Answers must be in two decimal places. **(YELLOW)**



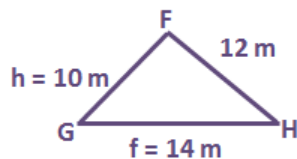
$b = \underline{\hspace{2cm}}$ m

2. Find the missing side in the triangle given below. Answers must be in two decimal places. **(LIGHT BLUE)**



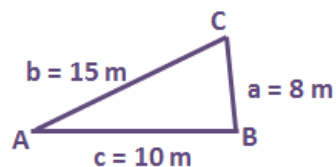
$d = \underline{\hspace{2cm}}$ m

3. Find the largest angle in the triangle given below. Answers must be in two decimal places. **(RED)**



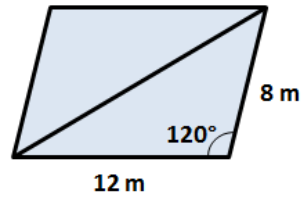
Largest angle = $\underline{\hspace{2cm}}$

4. Find the largest angle in the triangle given below. Answers must be in two decimal places. **(DARK GREEN)**



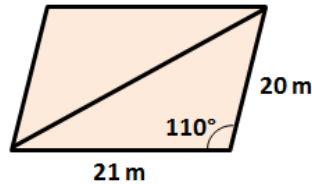
Largest angle = $\underline{\hspace{2cm}}$

5. Find the length of the diagonal in the parallelogram given below. Answers must be in two decimal places. **(LIGHT GREEN)**



Length of the diagonal = _____ m

6. Find the length of the diagonal in the parallelogram given below. Answers must be in two decimal places. **(LIGHT GREEN)**



Length of the diagonal = _____ m

7. In triangle PQR, $p = 8$, $q = 6$ and angle $R = 90^\circ$. What is the length of side r ? Answers must be in two decimal places. **(YELLOW)**

Length of side $r =$ _____

8. In triangle ABC, $a = 18$, $b = 26$ and angle $C = 45^\circ$. What is the length of side c ? Answers must be in two decimal places. **(LIGHT GREY)**

Length of side $c =$ _____

9. In triangle ABC, $a = 18$, $b = 26$ and $c = 20$. What is the measure of the largest angle? Answers must be in two decimal places. **(ORANGE)**

Measure of the largest angle = _____

10. In a parallelogram, the side lengths are 10 and 12, and the larger angle is 130° . What is the length of the diagonal? Answers must be in two decimal places. **(LIGHT GREEN)**

Length of the diagonal = _____