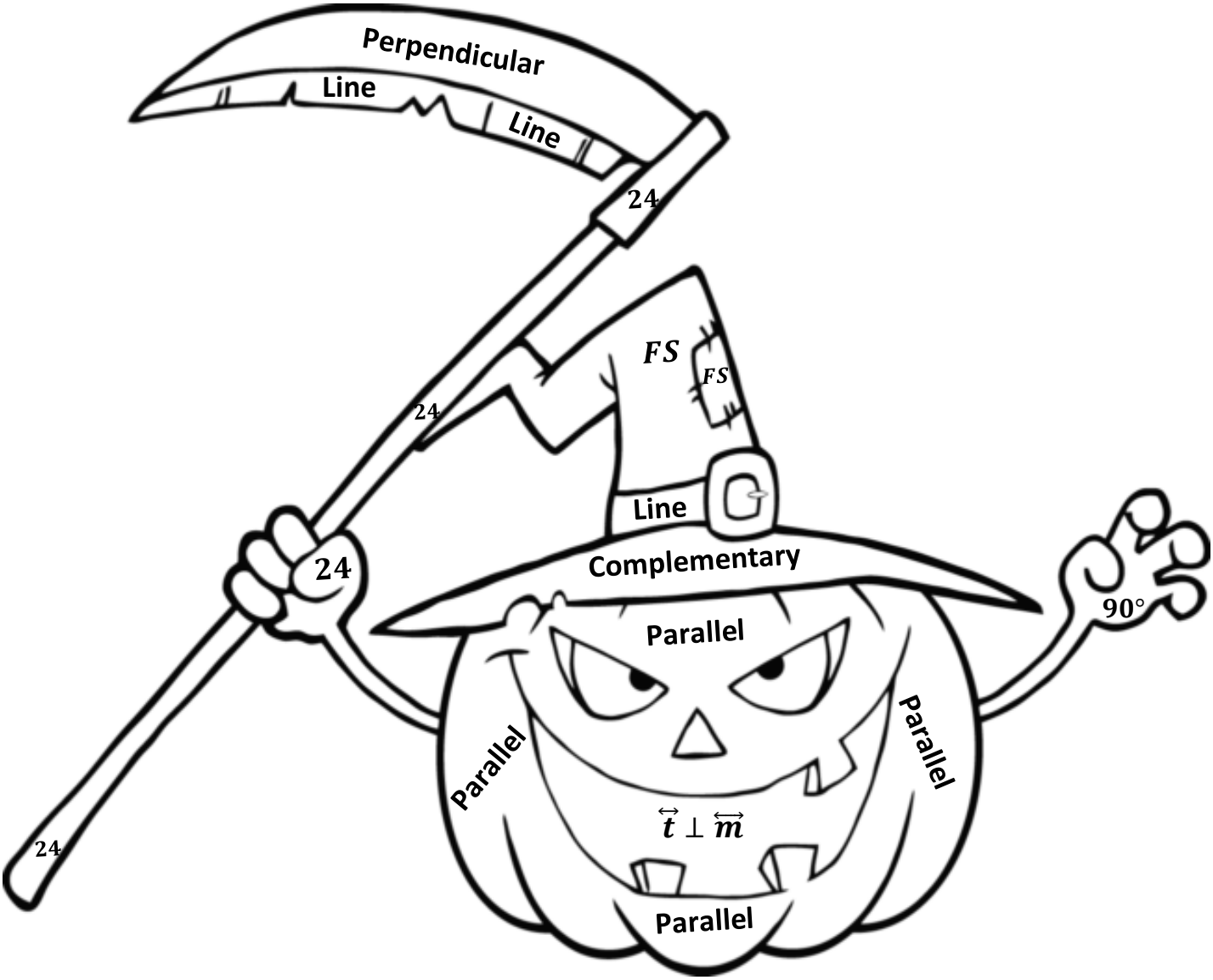
Name: _____ Period: _____ Date: _____

Halloween Color Match Activity

PROVE THEOREMS ABOUT PERPENDICULAR LINES

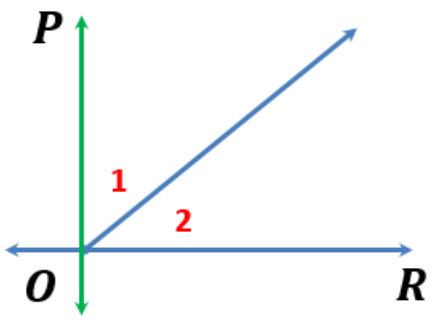


Directions: Answer the questions. Find your answer on the Halloween Jack O-Lantern. Then color according to your answers.

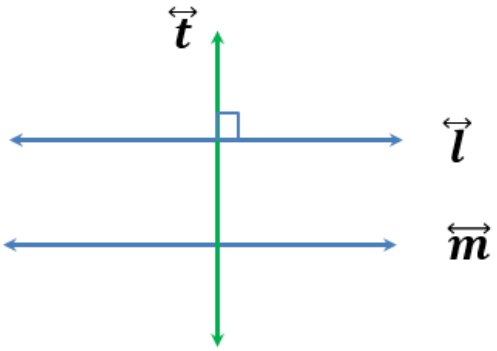
1. If two lines intersect to form a linear pair of congruent angles, then the lines are _____. **(RED)**

2. If two lines are perpendicular, then they intersect each other at angle of _____. **(ORANGE)**

3. In the figure below, if $\overleftrightarrow{OP} \perp \overleftrightarrow{OR}$ then $\angle 1$ and $\angle 2$ are _____. **(YELLOW)**



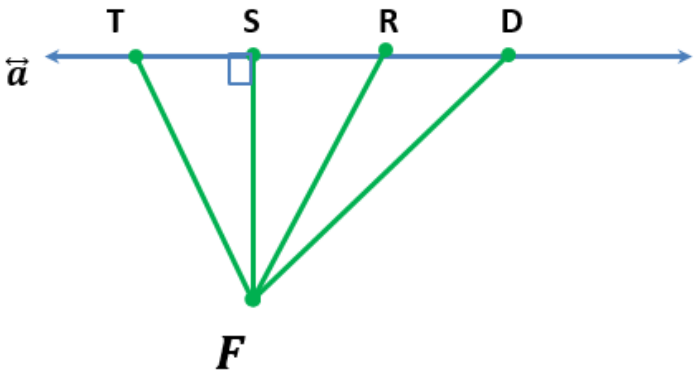
4. In the figure below, if $\overleftrightarrow{l} \parallel \overleftrightarrow{m}$ and $\overleftrightarrow{t} \perp \overleftrightarrow{l}$, then _____. **(LIGHT YELLOW)**



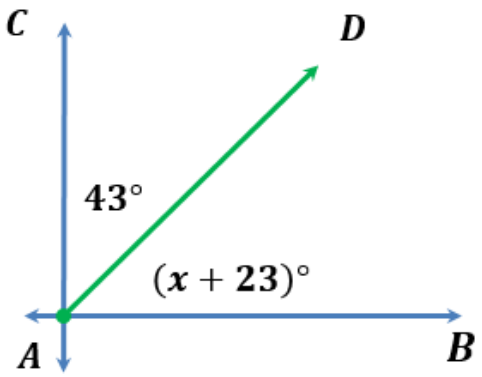
5. In a plane, if two lines are perpendicular to the same line, then they are _____ to each other. **(ORANGE)**

6. This perpendicular segment is the shortest distance between the point and the _____. **(RED)**

7. In the figure given below, which segment represents the shortest distance between the point F and the line? **(GREEN)**



8. In the figure given below, what is the value of x? **(ORANGE)**



Answers:

1. Perpendicular
2. $90°$
3. Complementary
4. $\overleftrightarrow{t} \perp \overleftrightarrow{m}$
5. Parallel
6. Line
7. FS
8. 24