Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period: \_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_
**Halloween Color Match Activity** PROVE THEOREMS ABOUT PERPENDICULAR LINES



**Line**

**Line**

$$24$$

$$24$$

$$24$$

$$24$$

$$FS$$

$$FS$$

**Line**

**Parallel**

**Parallel**

**Parallel**

**Parallel**

$$\overleftrightarrow{t}⊥\overleftrightarrow{m}$$

**Complementary**

$$90°$$

**Perpendicular**

**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 $\overleftrightarrow{OP}⊥\overleftrightarrow{OR}$then $∠1 $and$ ∠2$ are \_\_\_\_\_\_\_\_\_\_\_\_. **(YELLOW)

 

4.** In the figure below, if $\overleftrightarrow{l}∥ \overleftrightarrow{m} $and$ \overleftrightarrow{t}⊥\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)**

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|  |  |
| --- | --- |
|  | **Answers:**1. **Perpendicular**
2. $90°$
3. **Complementary**
4. $\overleftrightarrow{t}⊥\overleftrightarrow{m}$
5. **Parallel**
6. **Line**
7. $FS$
8. $24$
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