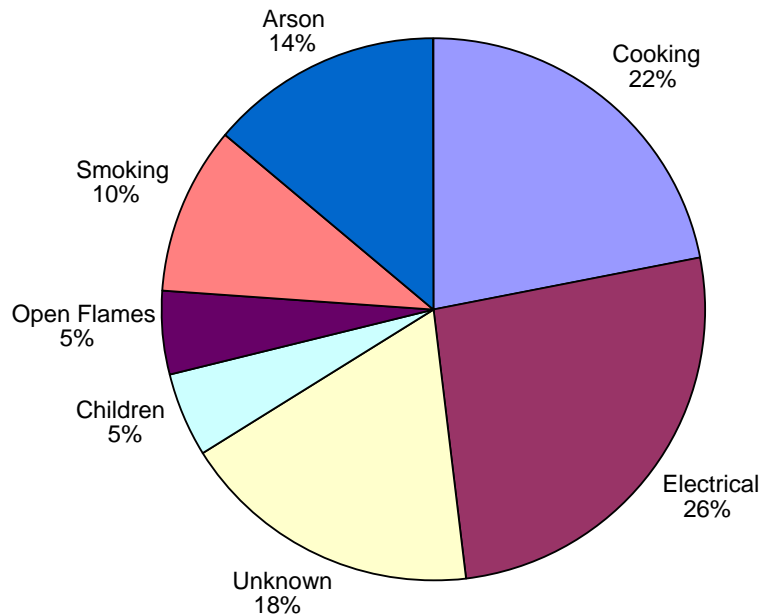


PROBLEM-OF-THE-DAY: ALGEBRA 1**WEEK:** November 26 to November 30**DAY:** Friday

RISD Objective: Given a circle (pie) graph, students will use it to answer questions, applying or finding the percents as necessary.

PROBLEM #67**Causes of House Fires 2006**

1,200 house fires occurred last year.

- 1. How many fires were caused by cooking?**
- 2. Which two categories have the same amount of causes?
How many fires total were there in these two categories?**
- 3. What is the measure of the angle for electrical caused fires?**
- 4. What would be some strategies to prevent house fires?**

MODEL SOLUTION #67

1. To find out how many fires were caused by cooking change 22% to decimal and then multiply decimal by total house fires occurred last year.

$$(0.22)(1200) = 264$$

So, 264 cooking fires were caused by cooking.

2. Open flames and children flames caused fires have the same amount.

To find out how many fires were caused by either open flames or children flames change 5% to decimal and then multiply decimal by total house fires occurred last year.

$$(0.05)(1,200) = 60$$

There are 60 fires in each category, for a total of 120 fires.

3. To find the angle measurement for electrical caused fires, change 26% to decimal and multiply it by 360.

$$(0.26)(360) = 93.6^\circ$$

The electrical fire category's angle is 93.6°

4. Answers will vary: no smoking in the house; protect fireplaces; keep children away from matches and lighters; etc.