

PROBLEM-OF-THE-DAY: ALGEBRA 1**WEEK:** December 3 to December 7**DAY:** Tuesday

RISD Objective: Given a set of data, students will be able to construct a bar graph, line graph, circle graph, box-and-whiskers plot, or stem-and-leaf plot which represents the data.

PROBLEM #69

Construct a circle graph for the given information.

Circle graphs are used to compare parts to a whole.

A circle graph should include:
graph title, sectors of the circle graph, sector labels including percentages.

Ingredients for a pizza	Weight of ingredient
Cheese	0.4 kg
Pepperoni	0.3 kg
Pizza sauce	0.09 kg
Crust	0.2 kg
Ham	0.15 kg

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MODEL SOLUTION #69

1st add all the weights.

$$0.4 + 0.3 + 0.09 + 0.2 + 0.15 = 1.14$$

Then, we should divide every weight by total weight (this will give you the percentage that needs to be included in the sector labels).

$$\frac{0.4}{1.14} = 0.35$$

$$\frac{0.3}{1.14} = 0.26$$

$$\frac{0.09}{1.14} = 0.08$$

$$\frac{0.2}{1.14} = 0.18$$

$$\frac{0.15}{1.14} = 0.13$$

Percents: 35%

26%

8%

18%

13%

3rd multiply every decimal by 360 (this will give you the degree to draw the circle graph).

$0.35 \times 360 = 126^\circ$	$0.26 \times 360 = 94^\circ$	$0.08 \times 360 = 29^\circ$	$0.18 \times 360 = 65^\circ$	$0.13 \times 360 = 47^\circ$
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Ingredients for a Pizza

