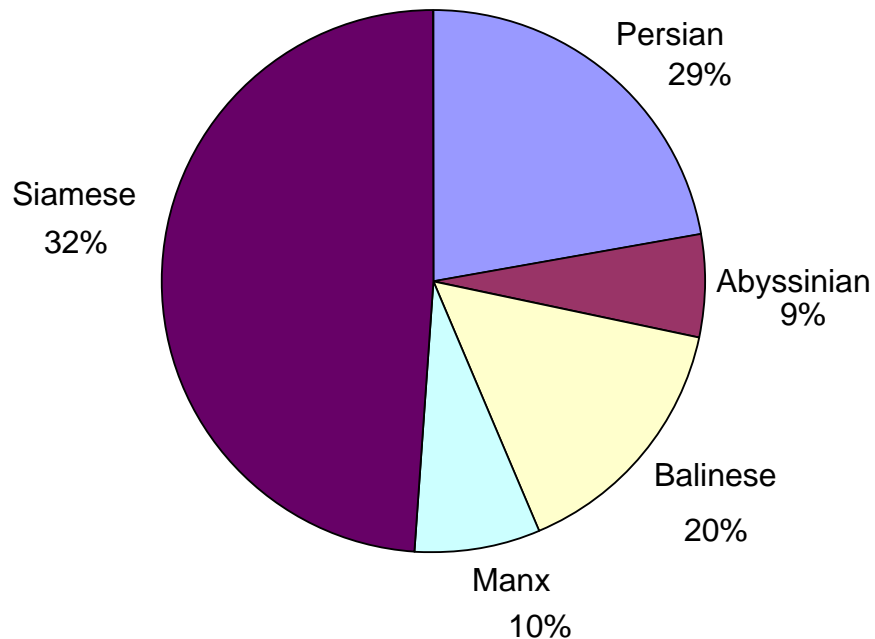


PROBLEM-OF-THE-DAY: ALGEBRA 1**WEEK:** November 26 to November 30**DAY:** Wednesday

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

PROBLEM #65**Roswell Humane Society Cat Show**

In the 2005 Roswell Humane Society Cat Show, there were 302 total entries.

- 1. How many Manx breed were entered?**
- 2. How many cats were entered in the Persian and the Abyssinian categories?**
- 3. In the 2006 Cat Show, there were 367 total entries. How many cats were entered in each category if the percentages stayed the same? Make a table to help organize your answers.**

MODEL SOLUTION #65

1. To find out how many Manx breed were entered in the 2005 Roswell Humane Society Cat Show change 10% to decimal and then multiply decimal by total entries.

$$(0.10)(302) = 30$$

So, 30 Manx breed were entered.

2. To find out how many cats were entered in the Persian and the Abyssinian categories change the percentages to decimals add them together and then multiply it by total entries.

$$(0.29 + 0.09) = 0.38$$

$$(0.38)(302) = 114.76$$

Approximately 114 or 115 Persian and Abyssinian breeds were entered.

3. To find out how many cats were entered in each category if the percentages stayed the same, change the percentages to decimals and then multiply it by total entries.

Breed of cat	Calculations	Number of entries
Persian	$(0.29)(367)$	106
Abyssinian	$(0.29)(367)$	33
Manx	$(0.29)(367)$	37
Siamese	$(0.29)(367)$	117
Balinese	$(0.29)(367)$	74