

## PERCENTAGES & CIRCLE GRAPHS

Important Things to Remember (Fill in the blank)

### Calculating Percentages

**Step One:** Add all data numbers together to calculate the whole total.

Example:

Ice Cream	Votes For Favorite Ice Cream	
Chocolate	12	←
Vanilla	15	←
Strawberry	8	←
Cookie Dough	17	←
Swirl	11	←

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Total = \_\_\_\_\_

**Step Two:** Divide EACH data number by \_\_\_\_\_ . Round the decimal to the nearest \_\_\_\_\_

**Step Three:** Move the decimal over TWICE & you have your percentage!

Example:

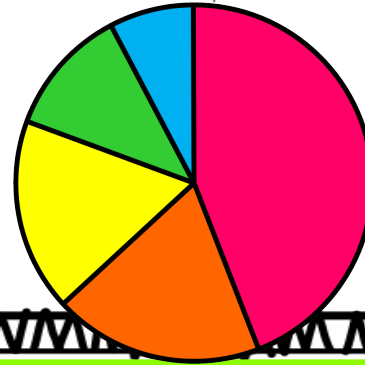
Ice Cream	Equation	Equals (Nearest Hundredth)
Chocolate	$12/63$	$0.19 = \%$
Vanilla	$15/63$	$0.24 = \%$
Strawberry	$8/63$	$0.13 = \%$
Cookie Dough	$17/63$	$0.27 = \%$
Swirl	$11/63$	$0.17 = \%$

## CIRCLE GRAPH PRACTICE 2

Favorite Sport

Sport	Number of People Voted	%
Football	15	
Basketball	21	
Hockey	16	
Volleyball	14	
Soccer	28	
Track & Field	11	

Favorite Sport



# CIRCLE GRAPHS

## Notes & Practice Pages

# PERCENTAGES & CIRCLE GRAPHS

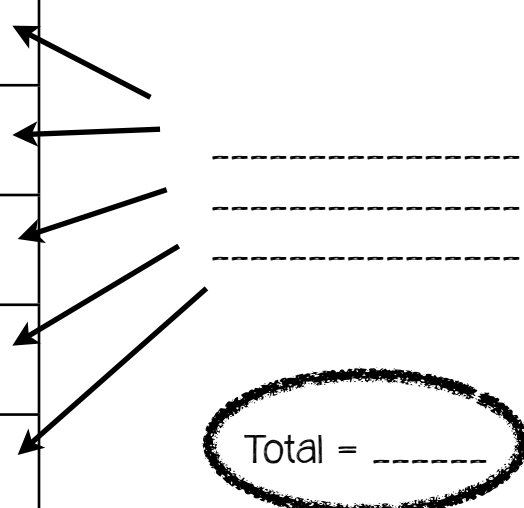
Important Things to Remember (Fill in the blank)

## Calculating Percentages

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Example:

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Step Two: Divide EACH data number by ----- . Round the decimal to the nearest ----- .

Step Three: Move the decimal over TWICE & you have your percentage!

Example:

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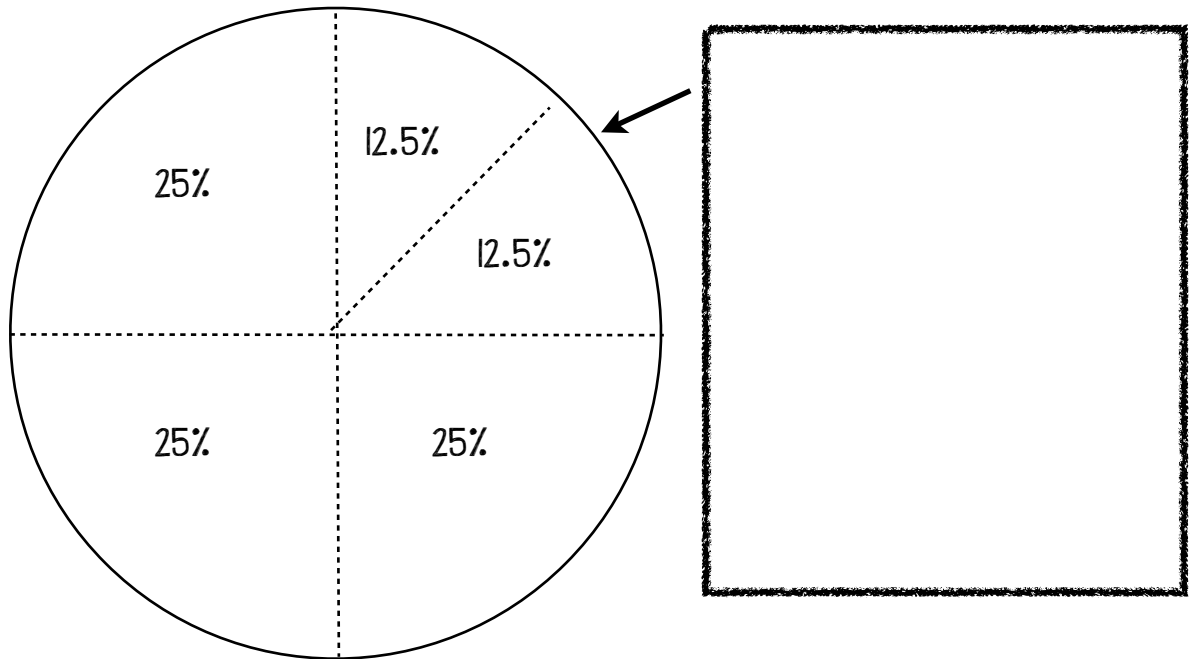
Step Four: -----!

Add all of your percentages together. You should get 100%!

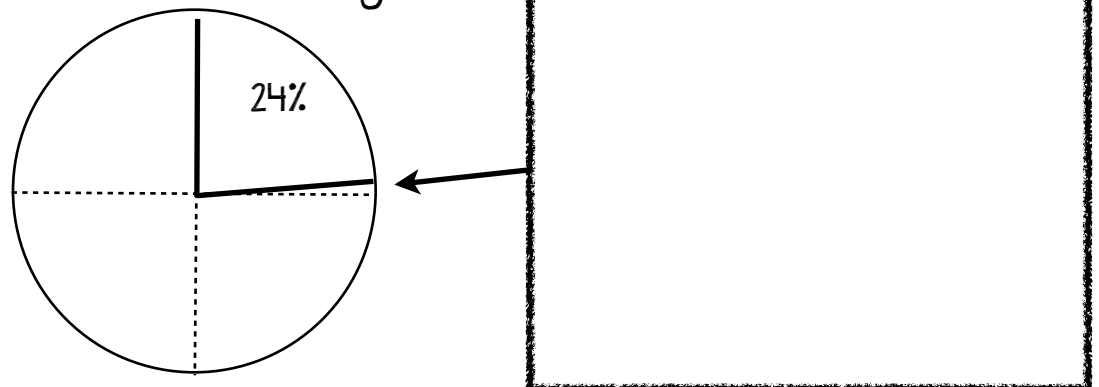
Important Note: Because you rounded, you MAY have a 1% margin of error. This means you could get 99% or 101% & still be okay!

### Creating Circle Graphs

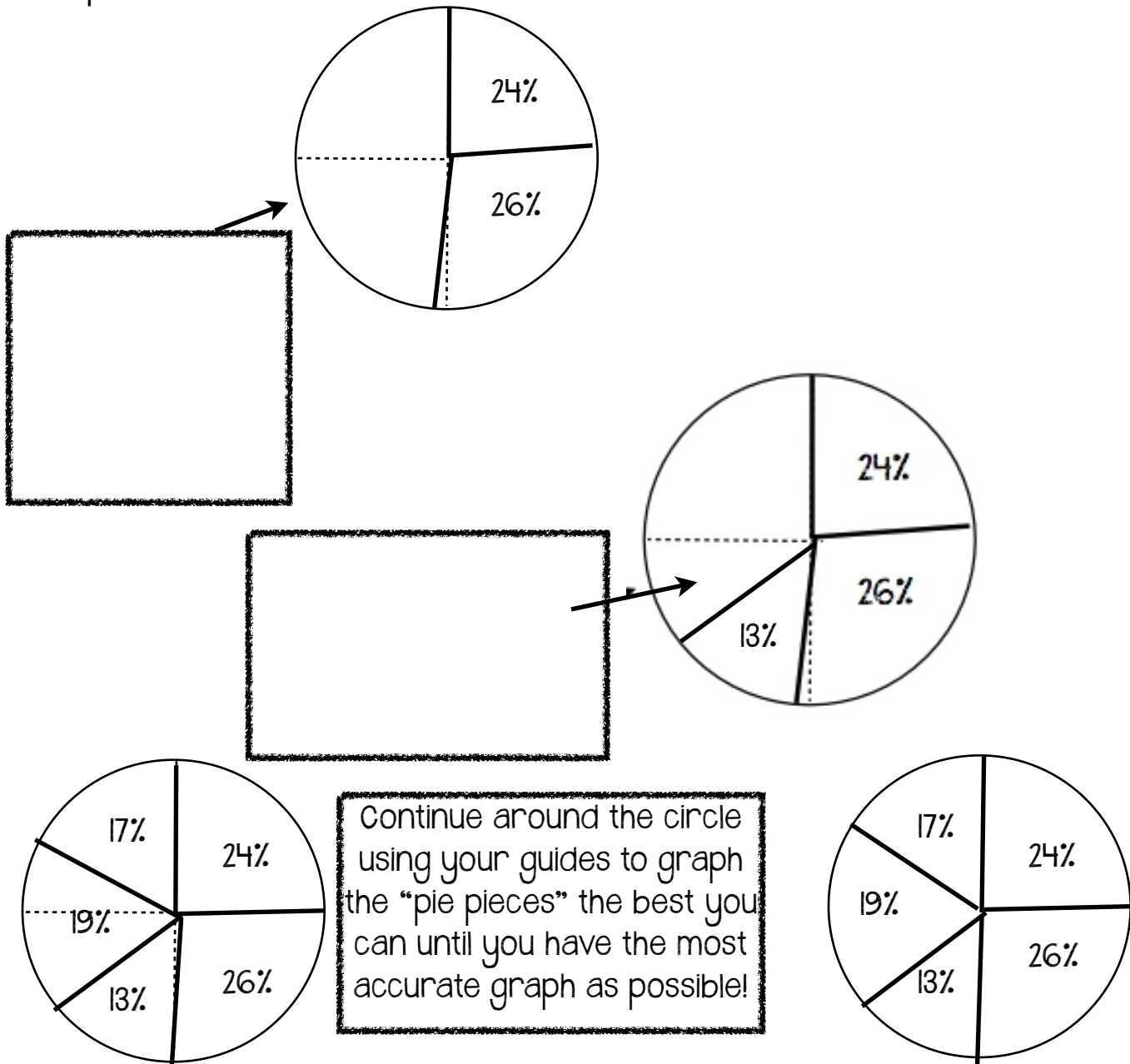
Step One: Use a PENCIL to divide your circle into 4 equal parts. This gives you four 25% sections. This is a great guide to get you started.



Step Two: Choose the percentage that seems to be graphed the easiest. In our ice cream example, 24% seems to be the easiest to graph, but you could chose whichever is easiest for you!



Step Three: Continue to use the guides you have created to graph each percentage in your data set. Here are the steps from the ice cream example:



Step Four: Check & finalize your graph. Be sure your "pie pieces" look correct. For example, if the 26% piece looks smaller than the 19% piece, you must have done something wrong. When it looks good, color each pie piece or provide a key so you know which pie piece represents which data.

# CALCULATING PERCENTAGES PRACTICE

1. The following data table lists the number of people that like each type of music. Calculate the percentage of the people that like each type of music.

Type of Music	Number of People
Rap	81
Country	57
Gospel	64
Rock	122
Heavy Metal	117

Type of Music	% of People
Rap	
Country	
Gospel	
Rock	
Heavy Metal	

2. The following data tables list a class of votes for their favorite subjects. Calculate the percentage of the class that likes each subject.

Class	Number of Votes
Math	3
Science	12
Language Arts	8
Social Studies	10
P.E.	14
Art	6

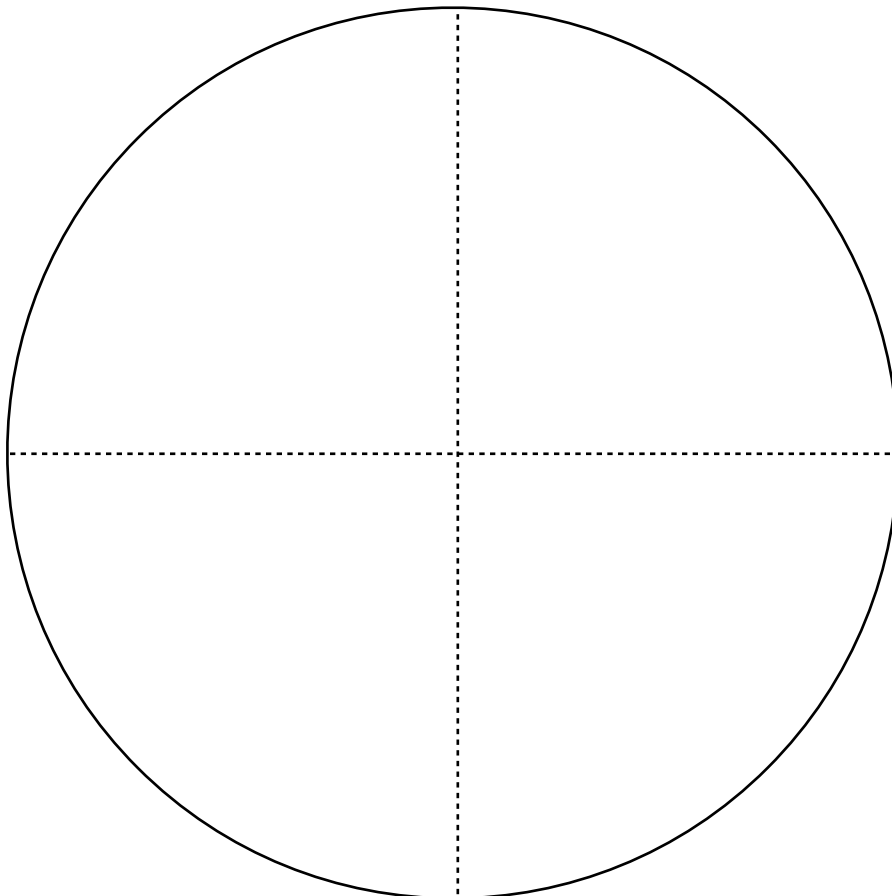
Class	% of Votes
Math	
Science	
Language Arts	
Social Studies	
P.E.	
Art	

# CIRCLE GRAPH PRACTICE 1

Hours a Day 5 Different Teenagers Watch TV

Teenager	Hours of TV Watched Per Day (24 Hours)	% of the day
Steve	4	
Heather	7	
Chad	2	
Maria	8	
Wendy	1	

Hours a Day Teenagers Watch TV

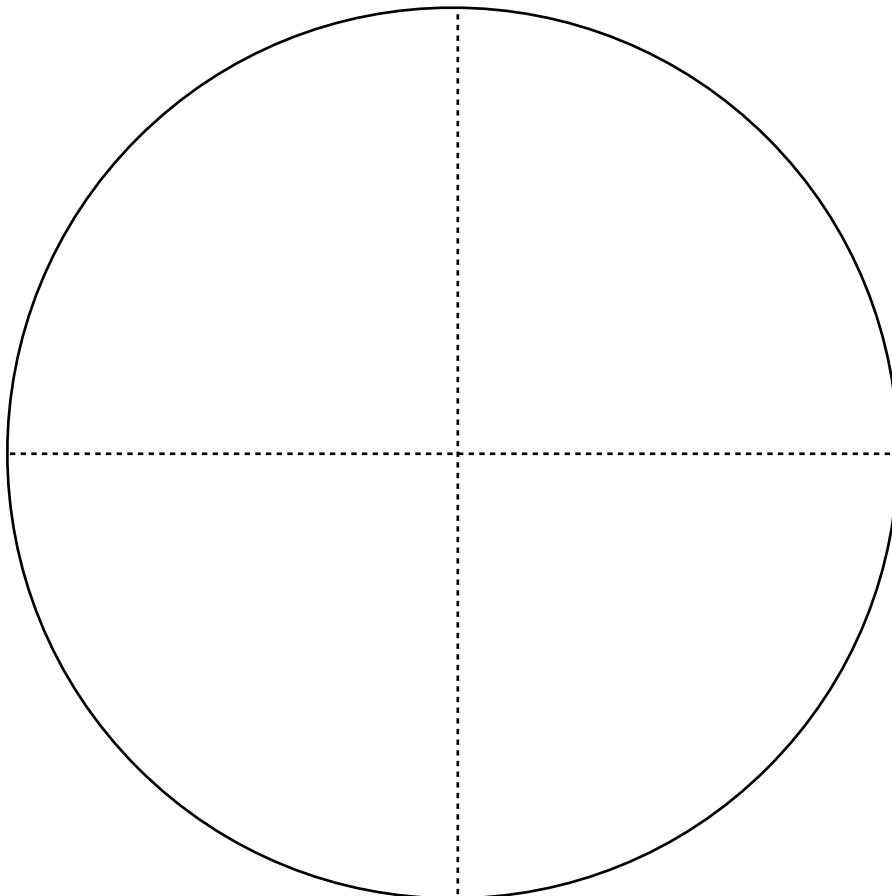


# CIRCLE GRAPH PRACTICE 2

Favorite Sport

Sport	Number of People Voted	%
Football	15	
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Favorite Sport

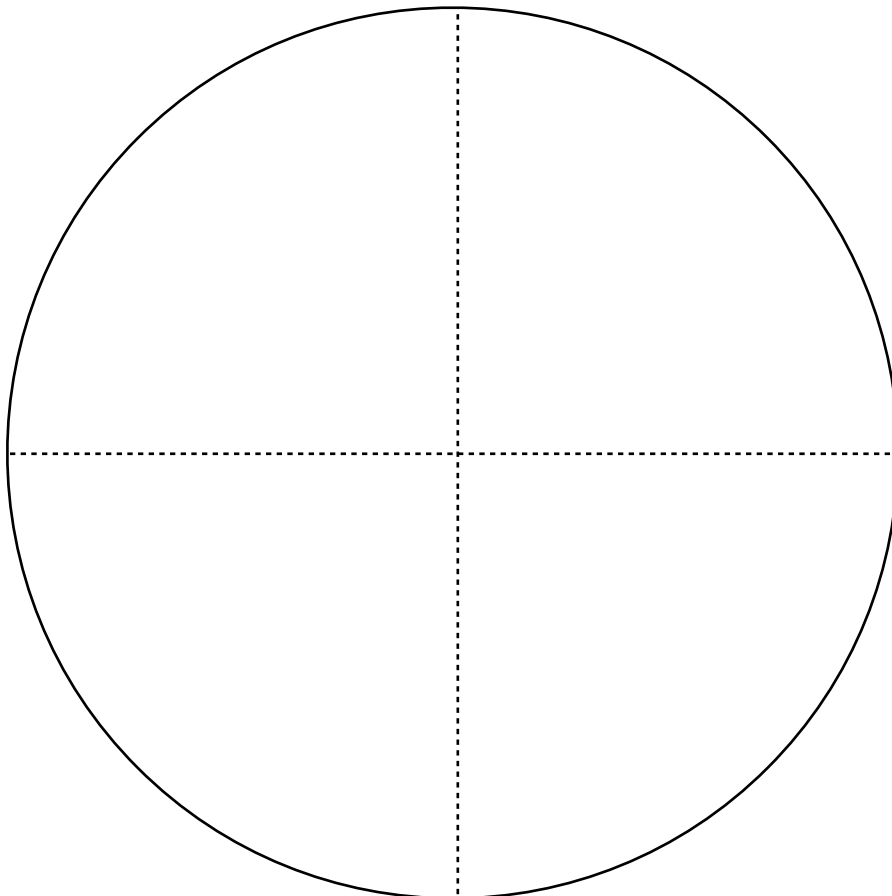


# CIRCLE GRAPH PRACTICE 3

Various Animals in an Ecosystem

Animal	Number of Animals	% of Ecosystem
Emperor Penguin	52	
Sea Leopard	30	
Fish	213	
Skua Bird	25	
Orca Whale	10	
Shrimp	348	

Animals That Make Up An Ecosystem



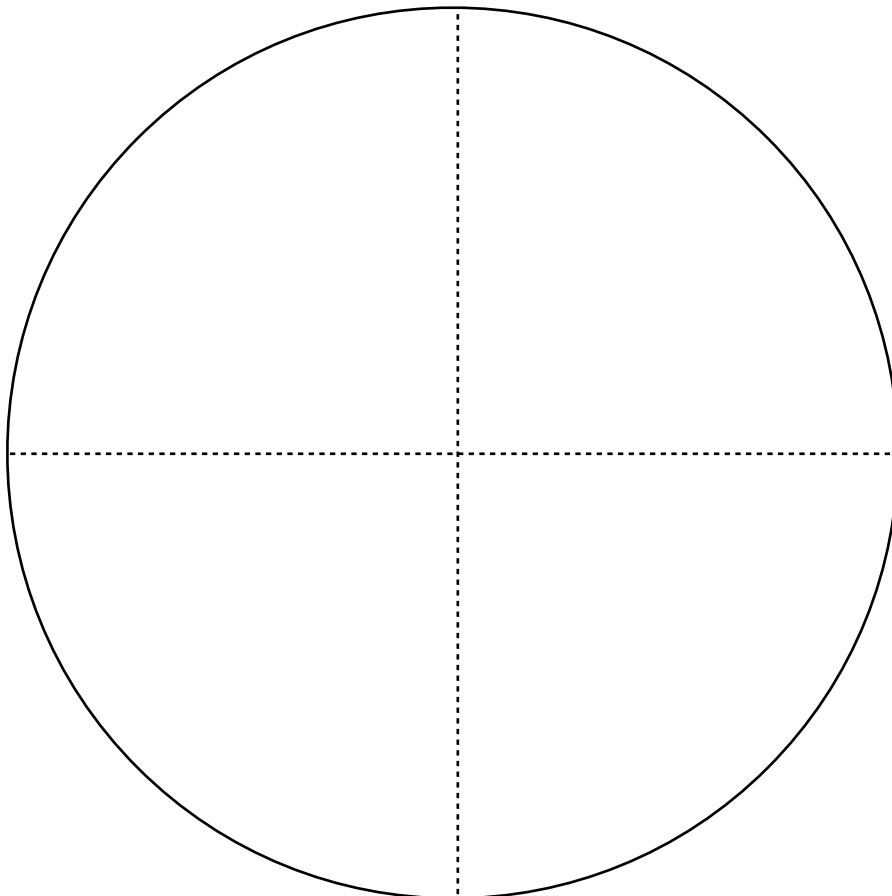


# CIRCLE GRAPH PRACTICE 4

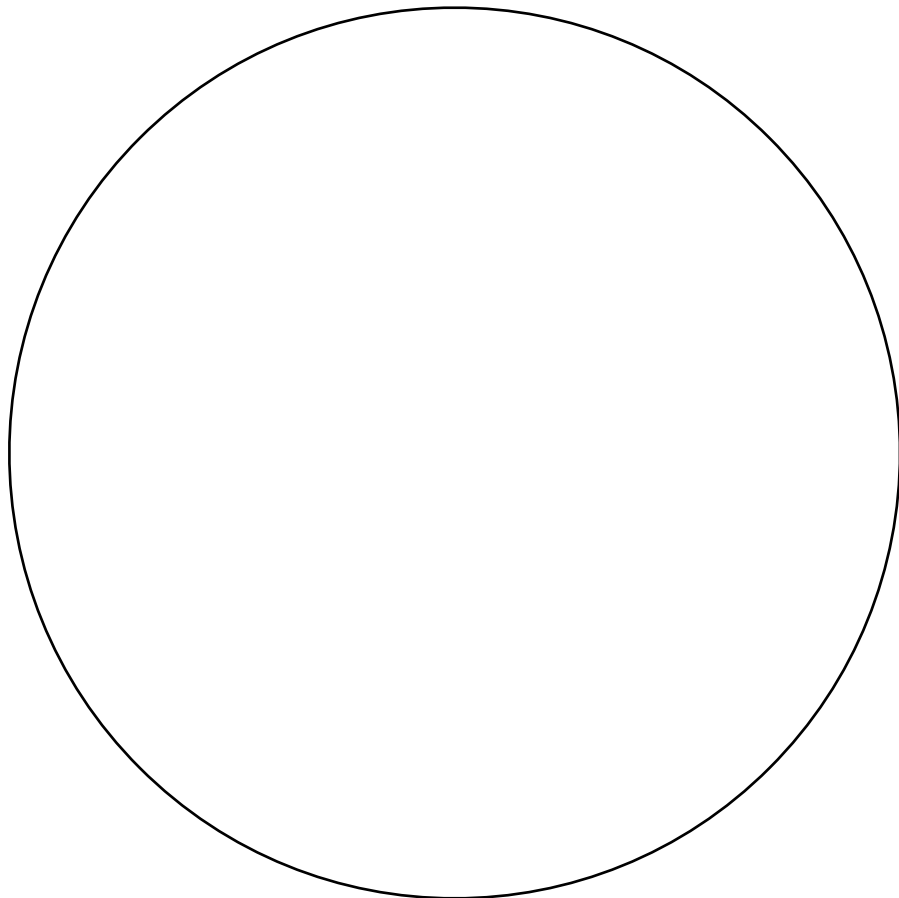
Gum Ball Flavors in a Gum Ball Dispenser

Flavor	Number of Gum Balls	% of Flavors
Strawberry	234	
Lemon	312	
Blueberry	276	
Green Apple	189	
Grape	390	
Orange	156	

Gum Ball Flavors in a Gum Ball Dispenser



# CIRCLE GRAPH



# PERCENTAGES & CIRCLE GRAPHS

## Important Things to Remember - Answer Key

### Calculating Percentages:

Step One: Add all data numbers together to calculate the whole total.

Example:

Ice Cream	Votes For Favorite Ice Cream
Chocolate	12
Vanilla	15
Strawberry	8
Cookie Dough	17
Swirl	11

Add these numbers together:

Total = 63

Step Two: Divide EACH data number by your total. Round the decimal to the nearest HUNDREDTH.

Step Three: Move the decimal over TWICE & you have your percentage!

Example:

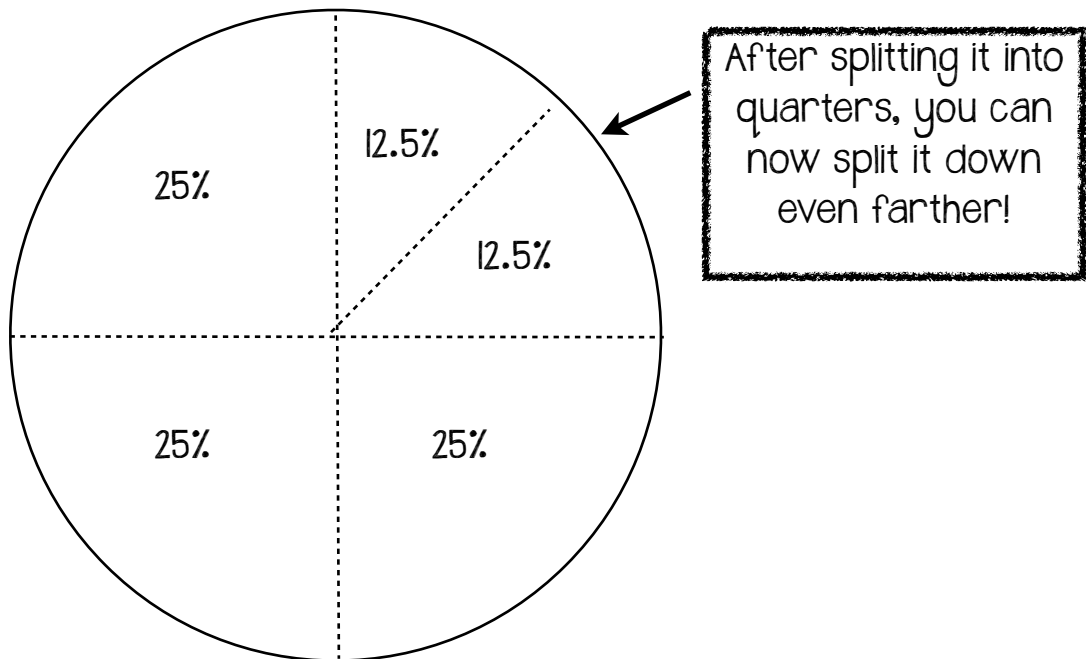
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Vanilla	$15/63$	$0.24 = 24\%$
Strawberry	$8/63$	$0.13 = 13\%$
Cookie Dough	$17/63$	$0.27 = 27\%$
Swirl	$11/63$	$0.17 = 17\%$

Step Four: CHECK YOUR WORK! Add all of your percentages together. You should get 100%!

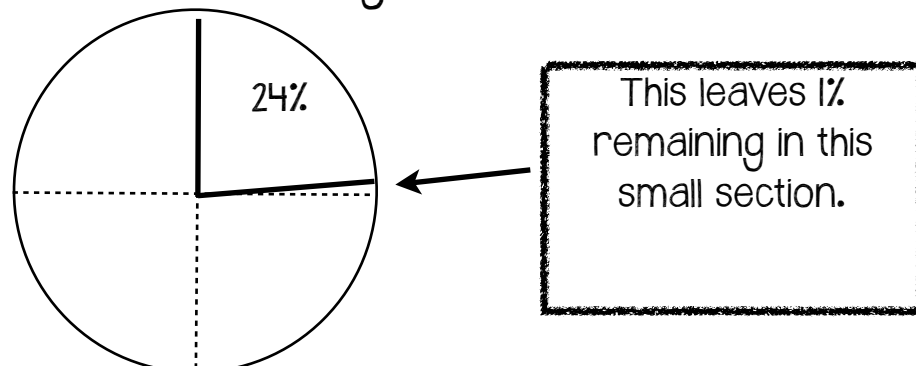
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## Creating Circle Graphs

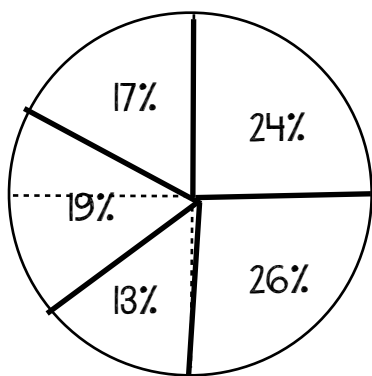
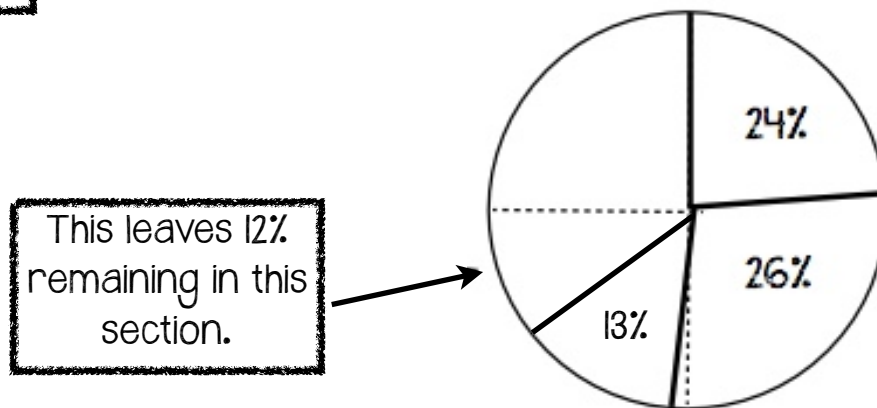
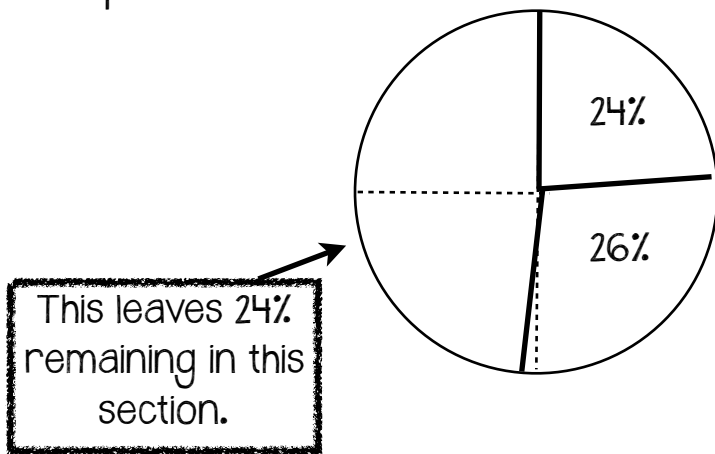
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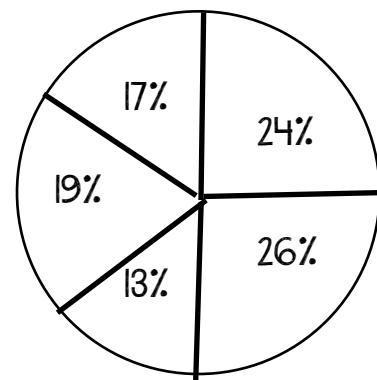
Step Two: Choose the percentage that seems to be graphed the easiest. In our ice cream example, 24% seems to be the easiest to graph, but you could chose whichever is easiest for you!



Step Three: Continue to use the guides you have created to graph each percentage in your data set. Here are the steps from the ice cream example:



Continue around the circle using your guides to graph the "pie pieces" the best you can until you have the most accurate graph as possible!



Step Four: Check & finalize your graph. Be sure your "pie pieces" look correct. For example, if the 26% piece looks smaller than the 19% piece, you must have done something wrong. When it looks good, color each pie piece or provide a key so you know which pie piece represents which data.