

Lesson 4: How Do We Choose?

Let's vote and choose a winner!

4.1: Which Was “Yessier”?

Two sixth-grade classes, A and B, voted on whether to give the answers to their math problems in poetry. The “yes” choice was more popular in both classes.

	yes	no
class A	24	16
class B	18	9

Was one class more in favor of math poetry, or were they equally in favor? Find three or more ways to answer the question.

4.2: Which Class Voted Purpler?

The school will be painted over the summer. Students get to vote on whether to change the color to purple (a “yes” vote), or keep it a beige color (a “no” vote).

The principal of the school decided to analyze voting results by class. The table shows some results.

	yes	no
class A	26	14
class B	31	19

In both classes, a majority voted for changing the paint color to purple. Which class was more in favor of changing?

4.3: Supermajorities

- Another school is also voting on whether to change their school’s color to purple. Their rules require a $\frac{2}{3}$ supermajority to change the colors. A total of 240 people voted, and 153 voted to change to purple. Were there enough votes to make the change?
- This school also is thinking of changing their mascot to an armadillo. To change mascots, a 55% supermajority is needed. How many of the 240 students need to vote “yes” for the mascot to change?
- At this school, which requires more votes to pass: a change of mascot or a change of color?

4.4: Best Restaurant

A town's newspaper held a contest to decide the best restaurant in town. Only people who subscribe to the newspaper can vote. 25% of the people in town subscribe to the newspaper. 20% of the subscribers voted. 80% of the people who voted liked Darnell's BBQ Pit best.

Darnell put a big sign in his restaurant's window that said, "80% say Darnell's is the best!"

Do you think Darnell's sign is making an accurate statement? Support your answer with:

- Some calculations
- An explanation in words
- A diagram that accurately represents the people in town, the newspaper subscribers, the voters, and the people who liked Darnell's best