Lesson

Due 04/12/24

Algebra and Algebraic Thinking
Solve Problems with Inequalities

In Progress

🔊 Elena is selling tickets to a school play. She sells the tickets for $15 each. Her goal is to raise more than $180 selling the tickets. She wants to know how many tickets she can sell to meet her goal.

🔊 **Let t be the number of tickets Elena sells. Which inequality represents the situation?**

$$15t > 180$$

🔊 **Solve the inequality $15t > 180$.**

t $> ▾$ ✓ | 12 ✓

Omar has a gift card for $25 at a clothing store. He wants to buy socks that cost $4 per pair. He also has a coupon for $5 off his entire purchase. Omar wants to know how many pairs of socks he can buy.

Let p be the number of pairs of socks Omar buys. Write an inequality that represents the situation.
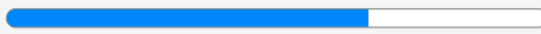
$$4p - 5 \leq 25$$

Solve the inequality $4p - 5 \leq 25$.

p $\leq$ 7.5

Complete the sentence.

Omar can buy   at most 7   pairs of socks.

Eight less than a number, n, is at least 10.

Which inequality represents this statement?

$n - 8 \geq 10$

Lesson   **Due 04/12/24**

Measurement and Data

Understand Random Sampling

In Progress

🔊 Aaron is president of the video game club at Central Middle School. For a school project, he needs to find out the number of years a typical member of the club has been playing video games.

🔊 **Which group describes the population for Aaron's project?**

🔊 All students in the video game club

🔊 **Which method will give Aaron a sample of the population?**

🔊 Survey students who joined the video game club in September.

Sadie wants to know how well food and drinks sell at a baseball game. She plans to survey a representative sample of fans at the game.

Which method is most likely to give Sadie a representative sample of fans at the game?

Survey all fans whose ticket number ends in 3 or 7.

Jamar's garden has carrots (C), beets (B), and potatoes (P). The vegetables are planted in rows. He wants to choose a sample of the plants to check for pests.

Which sample is most representative of the population?
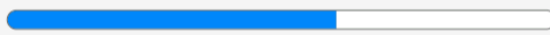
Sample B

C C C B B B P P P
C C C B B B P P P
C C C B B B P P P
C C C B B B P P P

Jordan wants to know how many letters are in the first name of a typical student in his English class.

Which method can Jordan use to choose a random sample of students in his English class?

Write the names of each student in the class on a card. Then, shuffle the cards and choose 5 without looking.
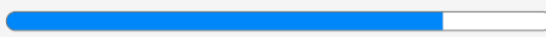
Students at Valley Middle School have five choices for a new mascot. A teacher surveys a random sample of 50 students to see which mascot they will choose. The results are shown in the table.

Which claim is most strongly supported by the data?

About the same number of students at the school will vote for a bear as for a lion.

Mascot	Number of Votes
Tiger	10
Bear	15
Lion	14
Cougar	5
Shark	6

NEXT LESSON

$0.70(58)$

$7(58)$

$\frac{70}{100}(58)$

$\frac{1}{70}(58)$

$70(58)$

Gina is shopping for a new bicycle. The price of the bicycle is $300 and there is an 8% sales tax. Gina wants to know the total price of the bicycle including sales tax.

Which table represents the situation?

Total Price	
?	
Price Before Tax	Sales Tax
$300.00	8%

A mattress store is having a sale. All mattresses are 30% off. Nate wants to know the sale price of a mattress that is regularly $1,000.

Which table represents the situation?

Regular Price $1,000	
Sale Price	Discount
?	30%

Maeve is buying lunch for her friends at a restaurant. The bill is $40, and she wants to leave a 15% tip.

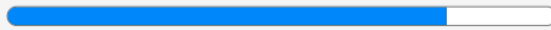Let p equal the total amount Maeve pays. Which equation can you use to find p?

$$p = 40 + 0.15(40)$$

Solve the equation for p.

$$p = 40 + 0.15(40)$$
$$= 40 + \boxed{6}$$
$$= \boxed{46}$$

Gina is shopping for a new bicycle. The price of the bicycle is $300 and there is an 8% sales tax. Gina wants to know the total price of the bicycle including sales tax.

Which table represents the situation?

Total Price
?

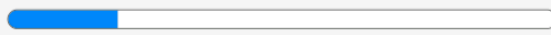| Price Before Tax	Sales Tax
$300.00	8%

🔊 A mattress store is having a sale. All mattresses are 30% off. Nate wants to know the sale price of a mattress that is regularly $1,000.

🔊 **What is the sale price of the mattress? Enter the amount in the table.**

Regular Price	
☐ %	
$ 1000	

Sale Price	Discount
☐ %	30 %
$ 700	$ 300

Resume Lesson

Lina's purchase

4 tickets and 1 fee

x	x	x	x	8

100

$$4x + 8 = 100$$