

Grade 8 Math Learning Packet #4

June 1, 2020 to June 11, 2020

Additional Optional Resources and Activities
are available on Math Grade 8 Google Classroom
code: [bipk7lw](#)

You can access all of these practice
resources through CLEVER:

Study Island
Gizmos
Edmentum
ST Math

Solving Equations and Inequalities

$\frac{3x + 2}{5} = 7$	$\frac{4x}{3} - 5 = 11$
$2(3x + 4) = 4x + 12$	$\frac{3}{4}(x - 2) = 12$
$x - 5 > 2x + 3$	$\frac{3(x - 4)}{12} \leq \frac{2x}{4}$
$4x + 3 < -1$	$4 - 6x \leq 2(2x + 3)$
$-\frac{1}{2}(4x - 2) > x + 2(x - 3)$	$2(x - 3) \leq 3x - 2$
$5 - 4x \geq 17$	$\frac{2}{5}(x + 3) = 6$
$\frac{2x}{5} - 9 = 6$	$2x - 3 \leq 3x - 2$
$-2.2(x - 6) \geq 61.6$	$\frac{-5}{7}x - 13 < -8$

1. ABC Painting Service charges \$10 per job and \$0.20 per square foot. If ABC earned \$50 for one painting job, how many square feet did they paint at the job?



2. Renting the ice-skating rink for a party costs \$200 plus \$4 per person. If the final charge for Diane's birthday party was \$324, how many people attended her birthday party?



3. The school cafeteria sells cartons of milk. The supplier charges \$0.35 per carton of milk, in addition to a delivery charge of \$75. What is the maximum number of milk cartons that the school can buy with a budget of \$500 for milk?



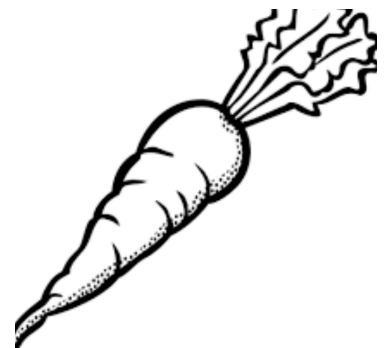
4. The cafeteria starts the school year with 130 gallons of ranch dressing. Each day, students eat about 2.25 gallons of ranch. The cafeteria needs to have at least 20 gallons left when they reorder. If they wait until they are completely out of the ranch dressing, they will not have any until the new order comes, which can take some time. For how many days will her ranch dressing supply last before she needs to reorder?



5. The school cafeteria has two options for selling pizza. The first option is they can buy ready - made pizzas that will cost them each \$14.50 to purchase. The second option is for them to buy all of the ingredients and make the pizza themselves. If the pizzas are made in the cafeteria, she can spend \$44.20 on ingredients and \$6.25 per pizza on labor. For how many pizzas it is cheaper for the cafeteria to make the pizzas themselves rather than buy them ready-made?



6. Elvira is comparing prices between two different suppliers of fresh lettuce. Val's Veggies charges \$250 for delivery plus \$1.50 per bag of lettuce. Sally's Salads charges \$100 for delivery plus \$4.00 per bag of lettuce. How many bags of lettuce must be purchased for Val's Veggies to be the cheaper option?



7. The local amusement park sells summer memberships for \$50 each. Normal admission to the park costs \$25. Admission for members costs \$15.

For each of these, I want to see your algebraic thinking.

a. If Darren wants to spend no more than \$100 on trips to the amusement park this summer, how many visits can he make if he buys a membership with part of that money?

b. How many visits can he make if he doesn't get a membership, but only pays normal admission instead?

c. If he increases his budget to \$160, how many visits can he make as a member?

d. How many can he make as a non-member with the increased budget of \$160?

