

Simplify.

Solve.

1.  $-16(-5)^2 + 1$

 $-399$ 

2.  $\frac{4x+3}{5} = \frac{2x-6}{4}$

 $x = -7$ 

3. Sara and two friends had dinner at a Spanish restaurant that charges \$6 per meal, and \$5 per appetizer. The three of them shared several meal and appetizers. The bill for each person was \$4.32.

$$\frac{6M}{3} + \frac{5A}{3} = 4.32$$

- a. What does  $6M$  represent in the context of the problem?

- b. What does  $A$  represent in the context of the problem?

} see teacher

- c. What is the vocabulary word for 4.32?

constant

- d. Why are the first two terms being divided by 3?

see teacher

4. Solve for y.

a.  $4x + 8y = 32$

$$y = -\frac{1}{2}x + 4$$

b.  $-8x + 5y = 25$

$$y = \frac{8}{5}x + 5$$

5. Mr. Sacco needs coffee to function. He has an 8 ounce mug and a 20 ounce mug. Mr. Zimmer will only allow Mr. Sacco to drink 100 ounces of coffee each day.

a. Write an equation for the possible number of 20 ounce mugs and 8 ounce mugs Mr. Sacco could drink in a day.

see teacher for

b. If Mr. Sacco has 3 twenty ounce glasses in the morning and then breaks his mug, how many 8 ounce glasses can he have in the afternoon?

at most 5

6. On the TV show, *The Big Bang Theory*, Penny tells Sheldon that she can make 20 Penny Blossoms in one day and she makes \$0.50 profit on each Penny Blossom, how much money can she make in a year?

\$ 3650