

**HOMEWORK 6,**  
**November, 1 2020**

*I would like to remind you that the homework should be done on a separate piece of paper.  
There is not enough space on this handout to show all work. **You must show all steps!***

**1.** Solve each equation:

a)  $2(g - 2) - 4 = 2(g - 3)$

b)  $3 + 4(p + 2) = 2p + 3(p + 4)$

c)  $5x + 2(1 - a) = 2(2a - 1)$

d)  $3x + 2(1 - 3(x + 2)) = 2x$

e)  $5(2m + 3) - (1 - 2m) = 2(3(3 + 2m) - (3 - m))$

f)  $3(r + 1) - (2(3 - 2r) - 3(3 - r)) = 2(r + 5) - 4$

**2.** Solve each equation:

a)  $|-x + 5| = 13$

b)  $|-3x - 2(x + 5)| = 45$

c)  $15 + |-3(2x - 8)| = 75$

d)  $-7 - 4|4x - 5(x - 3)| = 41$

3. Solve each equation for x:

a)  $\frac{w}{3} + \frac{w}{4} = \frac{7}{4}$

b)  $\frac{3c}{10} + \frac{c}{5} = \frac{3}{2}$

c)  $\frac{7m}{8} - \frac{3m}{5} = \frac{11}{2}$

4. Simplify:

$$\frac{(7 - 6.35) \div 6.5 + 9.9}{\left(1.2 \div 36 + 1.2 \div 0.25 - 1\frac{5}{16}\right) \div \frac{169}{24}} =$$

Write an equation to solve each of the following word problems:

5. Yesterday Peter came to the store, gave the cashier \$11.00 for 3 pounds of grapes, and received some change. Today Peter came to the same store again, gave the cashier \$15.00 for 5 pounds of grapes, and also received some change. How much does a pound of grapes cost, if the change Peter received yesterday is the same as the change he received today?
6. The watermelon is three times as expensive as the honeydew. John can buy 2 watermelons and have \$7.00 left or 4 honeydews and have \$13.00 left. How much does the honeydew cost? How much does a watermelon cost?
7. The difference of two integers is 9. Five times the smaller is 7 more than three times the larger. Find the numbers.