

**Solve in this handout:**

1. Simplify the expression:

$$x + 6 + 3y + 4 + x - 15 - 6y + 2x = \underline{\hspace{4cm}}$$

2. Remove parentheses:

$$\text{a). } 4(3w - 2) = \underline{\hspace{4cm}} \quad \text{b). } (2w + 4) \cdot 3 = \underline{\hspace{4cm}}$$

$$\text{c).}^* 4(3w - 2) + (2w + 4) \cdot 3 = \underline{\hspace{4cm}}$$

3. Find equivalent fractions:

$$\frac{1}{16} = \frac{\quad}{32}$$

$$\frac{6}{9} = \frac{\quad}{81}$$

$$\frac{2}{7} = \frac{\quad}{21}$$

$$\frac{2}{\quad} = \frac{10}{15}$$

4. Find ...

$$\frac{3}{5} \text{ of } 20 \text{ is}$$

$$\frac{7}{12} \text{ of } 60 \text{ is}$$

$$\frac{3}{10} \text{ of } 60 \text{ is}$$

$$\frac{3}{4} \text{ of } 80 \text{ is}$$

5. Calculate:

$$\frac{1}{12} + \frac{3}{4} =$$

$$\frac{1}{5} + \frac{1}{8} =$$

$$\frac{1}{12} - \frac{3}{4} =$$

$$\frac{1}{5} - \frac{1}{8} =$$

$$* \frac{1}{8} - \frac{1}{5} =$$

6. Calculate:

$$11 + (-4) =$$

$$7 - (-12) =$$

$$-16 - (-2) =$$

$$-1 + (-5) =$$

7. Expand where necessary to make denominators like to compare ( $>$ ,  $<$ , or  $=$ ):

$$\frac{4}{5} \square \frac{7}{9}$$

$$\frac{11}{16} \square \frac{5}{8}$$

$$\frac{5}{12} \square \frac{4}{9}$$

***Solve in your notebook:***

8. Solve the equations:

$$\frac{3}{4}x = 6$$

$$\frac{2}{5}y = 8$$

$$\frac{3}{7}w = 12$$

9. Write an equation to solve the word problem:

*There are few apples in a box. There are twice as many pears than apples in that box as well. Together with 18 bananas there are 75 fruit in the box altogether. How many apples are in the box?*