Collecting Like Terms

Copy these expressions into your exercise book and simplify.

1. **These questions are all additions.**

a $b+b+b+b$

d $6x+9x$

b $c+c+c+c+c+c$

e $y+9y+2y$

c $2x+3x$

f $3d+5d+7d+d$

2. **These expressions have some subtractions. Remember to take away any terms with a minus sign in front of them.**

a $5h-3h$

d $7g+5g-10g$

b $8t+3t-2t$

e $6f+3f-9f$

c $10p+p-5p$

f $2f-f+3f-f$

3. **You cannot add terms that have different letters in them, in these questions deal with each letter separately. These are all additions.**

a $a+b+b+a+a$

d $4h+g+6h+g+g$

b $3x+2y+5x+6y$

e $11w+21f+13w$

c $7b+b+8c+3b$

f $9k+j+2m+5k+3j+9m$

4. **These are similar to questions 3 but have some subtractions in them.**

a $3a+5b-a-b$

d $8a+5b+7c-3a-2b-6c$

b $6r+8t-4r-3t$

e $10x+3x+y+6z-5x+8y-2z$

c $2g+5h+3g-4g-h$

f $5d+3e+2d-5e$

5. **Only collect together terms that have the same letters (with the same powers) in them.**

a $x^2+4x+3x^2-2x$

d $5ab+3bc+2ba+cb$

b $5ab+6b+3ab-2b$

e $6xyz+5yzx-2yxz$

c $13a^2+5a-7a^2+3a$

f $2ab^2+3a^2b+5ab^2-a^2b$