

**Match each phrase to the correct algebraic expression :**

- |  |                   |
|--|-------------------|
| 1. The sum of 6 and $x$                        | $3x + 25$         |
| 2. Add 10 to the product of $x$ and $y$        | $ab - 8$          |
| 3. Take away 5 from the quotient of $y$ by 2   | $6 + x$           |
| 4. 8 added to the difference of $a$ and $b$    | $\frac{x}{5} - y$ |
| 5. 25 more than 3 times $x$                    | $xy + 10$         |
| 6. 8 less than the product of $a$ and $b$      | $\frac{y}{2} - 5$ |
| 7. Take away $y$ from the quotient of $x$ by 5 | $4(x - y)$        |
| 8. 4 times the difference of $x$ and $y$ .     | $(a - b) + 8$     |

**Let's do some more simplification , this time with brackets.**

Remember the distributive law?

e.g.  $2(x - y) = 2x - 2y$

e.g.  $-7(a + b + c) = -7a + (-7b) + (-7c)$   
 $= -7a - 7b - 7c$

**Can you simplify these:**

1.  $4(a + b) =$

2.  $-1(a + b) =$

3.  $6(x + y + z) =$

4.  $-8(x + y) =$

5.  $2(a^2 + b^2) =$

6.  $5(x - y) =$

7.  $-3(p + q) =$

**In the following , find the CHANGE and the % CHANGE.**

CHANGE	% CHANGE

1. Number of people at the concert at the start = 500. Number at the end = 450.
2. Tigers in the wildlife reserve in 2012 = 24. Tigers in the reserve in 2013 = 26.
3. Patients with dengue in August = 210. Patients with dengue in July = 280.
4. Cartons of juice of sold in summer = 600. Cartons of juice sold in winter = 150.
5. Rooms occupied in a hotel in February = 120. Rooms occupied in the hotel in March = 180.
6. Marks obtained in Math exam in class 5 = 80. Marks obtained in class 6 = 88.
7. Children in school on Monday = 1200. Children in school on Tuesday = 1000.
8. Fruit at the shop at start of day = 600. Fruit at the shop at end of day = 100.