

REMOVING BRACKETS AND SIMPLIFYING

Subtract $3h + 7$ from $5h + 4$

You **MUST** introduce brackets in order to subtract a combined term

$$(5h + 4) - (3h + 7)$$

$$5h + 4 - 3h - 7$$

$$5h - 3h + 4 - 7$$

$$2h - 3$$

ACTIVITY

1. Simplify the following:

a. $(x + 4) + (2x + 5)$ b. $(3y + 2p) + (5y + 4p)$ c. $(5h + 6) + (2h - 3)$

d. $(p + 3x) + (4x - 2p)$ e. $(4n - 5m) + (2n - 3m)$ f. $(2p - 4) + (3p - 3)$

g. $(3k + 5x) - (2k + 3x)$ h. $(6a + 7) - (4a + 9)$ i. $(5b + 3y) - (4b - y)$

j. $(4h + 5) - (-2h - 2)$ k. $(3w - 2z) - (w + 4z)$ l. $(d - 4) - (3d - 7)$

m. $(7x - 6) - (3x - 4)$

2. Find the sum of $2y - 5$ and $3y + 7$

3. Subtract $3p - 4$ from $4p + 8$

4. What must be added to $k + 3$ to get $3k - 5$?

5. What must be added to $2x - 6$ to get $4x + 4$?

Removing brackets and simplifying

1. Simplify the following

a. $2(x + y) + (y + x)$ b. $3(p + 4) + 2(p + 6)$ c. $4(a + 2b) + 2(a - b)$

d. $(3k - 6) + 2(k + 4)$ e. $5(m - 3n) + 3(m - 2n)$ f. $2(3y + 2x) - 3(y + x)$

g. $4(h + 5) - 2(h - 4)$ h. $3(3n - 7) - (4n - 5)$ i. $5(p - 2q) - 3(p + q)$

j. $2(2d - 3) - 3(d + 6)$

2. Find the sum of $2(x + y)$ and $3(x - y)$

3. Subtract $2a - 3b$ from $2(2a + 3b)$

4. What must be added to $2(p - 3)$ to get $5p - 3$?

5. What must be subtracted from $4(n - 4)$ to get $2(n - 2)$?