

Name : \_\_\_\_\_

## Rearrange & Evaluate

Sheet 1

1)  $5a + b = 4c - 3$

i) Rearrange the equation to make  $c$  the subject. \_\_\_\_\_

ii) Find the value of  $c$ , if  $a = 5$  and  $b = -4$ . \_\_\_\_\_

2)  $\sqrt{\frac{x+3}{2y-4}} = 6$

i) Rearrange the equation to make  $y$  the subject. \_\_\_\_\_

ii) Find the value of  $y$ , if  $x = -3$ . \_\_\_\_\_

3)  $-3g - 2h = \frac{d-56}{4}$

i) Rearrange the equation to make  $d$  the subject. \_\_\_\_\_

ii) Find the value of  $d$ , if  $g = \frac{1}{4}$  and  $h = 7$ . \_\_\_\_\_

4)  $-r + 8s = 9p^2q$

i) Rearrange the equation to make  $p$  the subject. \_\_\_\_\_

ii) Find the value of  $p$ , if  $q = 2$ ,  $r = 30$  and  $s = 24$ . \_\_\_\_\_

5)  $\sqrt[3]{\frac{-6m+10k}{10k-1}} = 2$

i) Rearrange the equation to make  $k$  the subject. \_\_\_\_\_

ii) Find the value of  $k$ , if  $m = 18$ . \_\_\_\_\_

6)  $32t - w - 7v + 10u = 0$

i) Rearrange the equation to make  $w$  the subject. \_\_\_\_\_

ii) Find the value of  $w$ , if  $t = -1$ ,  $u = 10$  and  $v = 15$ . \_\_\_\_\_

Name : \_\_\_\_\_

## Answer key

Sheet 1

### Rearrange & Evaluate

1)  $5a + b = 4c - 3$

i) Rearrange the equation to make  $c$  the subject.

$$c = \frac{5a + b + 3}{4}$$

ii) Find the value of  $c$ , if  $a = 5$  and  $b = -4$ .

$$c = 6$$

2)  $\sqrt{\frac{x+3}{2y-4}} = 6$

i) Rearrange the equation to make  $y$  the subject.

$$y = \frac{x + 147}{72}$$

ii) Find the value of  $y$ , if  $x = -3$ .

$$y = 2$$

3)  $-3g - 2h = \frac{d - 56}{4}$

i) Rearrange the equation to make  $d$  the subject.

$$d = 56 - 12g - 8h$$

ii) Find the value of  $d$ , if  $g = \frac{1}{4}$  and  $h = 7$ .

$$d = -3$$

4)  $-r + 8s = 9p^2q$

i) Rearrange the equation to make  $p$  the subject.

$$p = \pm \frac{1}{3} \sqrt{\frac{8s - r}{q}}$$

ii) Find the value of  $p$ , if  $q = 2$ ,  $r = 30$  and  $s = 24$ .

$$p = \pm 3$$

5)  $\sqrt[3]{\frac{-6m + 10k}{10k - 1}} = 2$

i) Rearrange the equation to make  $k$  the subject.

$$k = \frac{8 - 6m}{70}$$

ii) Find the value of  $k$ , if  $m = 18$ .

$$k = -\frac{10}{7}$$

6)  $32t - w - 7v + 10u = 0$

i) Rearrange the equation to make  $w$  the subject.

$$w = 32t + 10u - 7v$$

ii) Find the value of  $w$ , if  $t = -1$ ,  $u = 10$  and  $v = 15$ .

$$w = -37$$