

## Substitution – Negative Numbers

1. Given  $a = -3$  and  $b = -4$ , find the value of  $a^2 - ab$ .
2. Given  $c = -10$  and  $d = -5$ , find the value of  $3c - d^2$
3. Given  $p = -2$  and  $q = -6$ , find the value of  $q^2 - 5p$
4.  $A = x^2 - 3xy$ . Find the value of  $A$  when  $x = -5$  and  $y = -1$ .
5.  $P = u^3 - 3u$ . Find the value of  $P$  when  $u = -2$ .
6.  $H = xy - 3y^2$ . Find the value of  $H$  when  $x = -4$  and  $y = -3$ .
7.  $T = a(3a - c^2)$ . Find  $T$  when  $a = -2$  and  $c = -5$ .
8.  $L = u(3u - w)$ . Find  $l$  when  $u = -3$  and  $w = -6$ .
9.  $A = \frac{3x + y^2}{5x}$ . Find  $A$  when  $x = -2$  and  $y = -4$ .
10.  $P = \frac{2u - u^3}{7}$ . Find  $P$  when  $u = -3$ .
11.  $X = \frac{2(y^3 - 4)}{y^2}$ . Find  $X$  when  $y = -2$ .
12.  $T = \frac{u(2w + u^2)}{u - w}$ . Find  $T$  when  $u = -2$  and  $w = -4$ .
13.  $H = \frac{p^2(p - q)}{2q}$ . Find  $H$  when  $p = -10$  and  $q = -5$ .
14.  $G = \frac{2x(x - y^2)}{y - x}$ . Find  $G$  when  $x = -3$  and  $y = -1$ .
15.  $f(x) = 3x - x^2$ . Find  $f(-2)$ .
16.  $f(x) = x^3 - x^2$ . Find  $f(-3)$ .
17.  $f(x) = 2x - 4x^2$ . Find  $f(-4)$ .
18.  $f(y) = 3y^2 - 5y$ . Find  $f(-3)$ .
19.  $f(u) = 3u - u^3 - 6$ . Find  $f(-2)$ .
20.  $f(a) = a^3 - 4a + 5$ . Find  $f(-3)$