

## ACT COMPASS Preparation Worksheet

### Algebra: Substitution

Evaluate

1.  $a^2b$  when  $a = -2$   $b = 3$
2.  $a - bc$  when  $a = -2$   $b = -4$   $c = 4$
3.  $(b + d)^2$  when  $b = 3$   $d = 4$
4.  $bc^3 - ad$  when  $a = -2$   $b = 3$   $c = -4$   $d = 4$
5.  $-7(z + 4) - 7$  when  $z = 3$
6.  $(-3b - 8)(b + 6)$  when  $b = -5$
7.  $2y(cy - 4) - c - 10$  when  $y = 4$   $c = 4$
8.  $10x + 4$  when  $x = 1$
9.  $y = 4x - 3$  when  $x = -1$
10.  $y = x^2 - 5x + 7$  when  $x = -2$
11.  $y = 3x^2 - 12x + 4$  when  $x = -2$
12.  $y = 7x^2 + 12$  when  $x = 5$
13.  $y = x^4 + 3x^3 - x^2 + 6$  when  $x = -3$
14.  $y = 2x^3 - x^2 - 4x + 2$  at  $x = -3$
15.  $y = 5x^3 - 2x^2 + 3$  at  $x = 4$