

**JAWAPAN KERTAS 1 SET 5**

1.  $x = 0, x = 3$
2.  $n = 6$
3.  $fg(x) = 12x - 2m - 3, \quad gf(x) = 12x - 18 - m, \quad m = 15$
4.  $10, -6$
5.  $y = 0.56$  or  $-3.56$
6. (a)  $x = 5$                       (b)  $f(x) = (x - 5)^2 - 5$
7.  $-4 < m < 1$
8.  $y = 2x - 8$
9.  $3x^2 + 3y^2 + 8x + 6y - 5 = 0$
10.  $629(5^{3n-3})$
11.  $k = \sqrt{\frac{m+3}{81}}$
12. (a)  $a = 18$                       (b) standard deviation = 16.48
13. (a)  $1.396 \text{ rad}$                       (b)  $r = 16.12$
14.  $\frac{25}{3}$
15.  $d = 26$
16. (a) 78                      (b) 792
17. (a)  $X = \frac{1}{x^2} \quad Y = \frac{y}{x^2}$                       (b)  $m = -7$
18.  $h = -3, k = 5$
19. (a)  $\overrightarrow{BC} = -\underline{i} - 4\underline{j}$                       (b)  $\sqrt{17}$                       (c)  $(-3\underline{i} + \underline{j}) / \sqrt{10}$
20. (a) 15120                      (b) 2880
21.  $k = 6$