Functions Home Study **Name: _____**

Non-calculator!

1. $f(x) = 2x^2 - 1$ **(a) Evaluate f(-1)** **(b) Find t such that f(t) = 7** (a) $f(-1) = 2(-1)^2 - 1$ $= \underline{\underline{1}}$ (b) $f(t) = 2t^2 - 1$ $2t^2 - 1 = 7$ $2t^2 = 8$ $t^2 = 4$ $\underline{\underline{t = \pm 2}}$	**2. $g(x) = x^2 + 1$** **(a) Evaluate g(2)** **(b) Find t such that g(t) = 5**	**3. $h(x) = x^2 - 7$** **(a) Evaluate h(5)** **(b) Find t such that h(t) = 2**
4. $f(x) = 3x^2 - 2$ **(a) Evaluate f(-2)** **(b) Find m such that f(m) = 25**	**5. $g(x) = 4x^2 + 3$** **(a) Evaluate g(3)** **(b) Find n such that g(n) = 7**	**6. $h(x) = 5x^2 - 1$** **(a) Evaluate h(1)** **(b) Find b such that h(b) = 124**
7. $f(x) = 10x^2$ **(a) Evaluate f(-2)** **(b) Find b such that f(b) = 360**	**8. $g(x) = 6x^2 - 3$** **(a) Evaluate g(-1)** **(b) Find t such that g(t) = 51**	**9. $h(x) = 5x^2 + 4$** **(a) Evaluate h(5)** **(b) Find m such that h(m) = 4**
10. $f(x) = 8x^2 - 2$ **(a) Evaluate f(-3)** **(b) Find n such that f(n) = 798**	**11. $g(x) = 5x^2 + 7$** **(a) Evaluate g(4)** **(b) Find t such that g(t) = 47** **Leave answer as surd in simplest form**	**12. $h(x) = 9x^2 - 14$** **(a) Evaluate h(10)** **(b) Find p such that h(p) = 166** **Leave answer as surd in simplest form**