National 5 Home Ex 6 Solutions

1.

- f(-3)= -14

b.

- 4 – 2a^2 = 2
- a^2 = 2
- a = ± 1

2.

- 5 – x > 2x + 2
- -3x > -3
- x < 1

3.

- 2m$^{3/2}$
- + m$^{5/2}$

4.

- m = 2
- y - - 2 = 2(x – 3)
- y = 2x - 8

5.
- If right angled 110^2 = 90^2 + 60^2
- 110^2 = 12100, 90^2 + 60^2 = 11700
- 12100 does not equal 11700, so by the converse of Pythagoras, this is not a right angled triangle

6.

- (17 + x) / (24 + x) = 2/3
- 51 + 3x = 48 + 2x
- x = -3

7.
- SM^2 = 6^2 + 8^2
- SM = 10
- Tan a = 2/10

- $A = \tan^{-1}(2/10)$
- $A = 11.31$

Total = 23 marks