

# Work sheet 2

$$F = f(c)$$

1.  $f(0) = 32$ ,  $f(100) = 212$ . (a)  $m = \frac{\Delta F}{\Delta c} = \frac{212 - 32}{100 - 0} = \frac{180}{100} = 1.8$   $m = 1.8$

IF  $\Delta c = 10$ ,  $\Delta F = ?$

$\frac{\Delta F}{10} = 1.8$ , so  $\Delta F = 18$  ( $= 1.8 \cdot 10$ )

c	0	10	20	30	40	50	19	20	21	22
F	32	50	68	86	104	122	66.2	68	69.8	71.6

$$f(c) = \underline{1.8} (c - 20) + \underline{68}$$

$$\underline{f(c) = 1.8c + 32}$$

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2.  $f$  is linear,  $f(3)=4$ , slope = 2.  
 $x_0$   $y_0$

(a) is  $y - y_0 = m(x - x_0)$

(b)  $f(x) = \underline{2(x-3)} + \underline{4}$

(c)  $f(x) = \underline{2x} + \underline{\cancel{-(6+4)} - 2}$

(d) sketch graph of  $f$ .  $f(1) = 2 \cdot 1 - 2 = 0$

