

# Disability Score x Gross Pay (f-time 30+)

Gross Pay	0	1	2	3+	
	<del>0</del>	<del>1</del>	<del>2</del>		
under £15	18	17	(21)	26	18
15-19	27	38	(35)	26	38
20-24	<del>24</del>	<del>20</del>	<del>24</del>	<del>24</del>	<del>22</del>
20-29	37	36	(38)	35	19
25-34	21	19	(18)	19	6
30-39	12	3	(3)	10	<u>103</u>
35+	10	6	(3)	52	
40+	7	6	(3)		
	100	100	100		
Number	1223	69	34		

Males Employer	under 15	11	17	17	(18)	25	
	15-24	54	58	<del>58</del>	(61)	51	
	25-34	23	19	18	(18)	20	
	35+	11	6	6	(3)	5	
		1093	69	34		64	1260
female	under £10	34	(43)	(35)	(59)		
	10-14	38	(34)		(22)		
	15-19	17	(20)		(15)		
	£20+	11	(3)		(4)		
		452	35		27		

Source: Further Cross Tabs No. 12 & 22

# (a) $\frac{1}{x^2} = x^{-2}$

$x$	$y = x^{-2}$	$\frac{dy}{dx}$	$\frac{dy}{dx}$	$\frac{dy}{dx}$
1	1	-2	-2	-2
2	$\frac{1}{4}$	$-\frac{2}{4}$	$-\frac{1}{2}$	$-\frac{1}{2}$
3	$\frac{1}{9}$	$-\frac{2}{9}$	$-\frac{2}{9}$	$-\frac{2}{9}$
4	$\frac{1}{16}$	$-\frac{2}{16}$	$-\frac{1}{8}$	$-\frac{1}{8}$
5	$\frac{1}{25}$	$-\frac{2}{25}$	$-\frac{2}{25}$	$-\frac{2}{25}$
6	$\frac{1}{36}$	$-\frac{2}{36}$	$-\frac{1}{18}$	$-\frac{1}{18}$
7	$\frac{1}{49}$	$-\frac{2}{49}$	$-\frac{2}{49}$	$-\frac{2}{49}$
8	$\frac{1}{64}$	$-\frac{2}{64}$	$-\frac{1}{32}$	$-\frac{1}{32}$
9	$\frac{1}{81}$	$-\frac{2}{81}$	$-\frac{2}{81}$	$-\frac{2}{81}$
10	$\frac{1}{100}$	$-\frac{2}{100}$	$-\frac{1}{50}$	$-\frac{1}{50}$

$x$	$y = x^{-2}$	$\frac{dy}{dx}$	$\frac{dy}{dx}$	$\frac{dy}{dx}$
11	$\frac{1}{121}$	$-\frac{2}{121}$	$-\frac{2}{121}$	$-\frac{2}{121}$
12	$\frac{1}{144}$	$-\frac{2}{144}$	$-\frac{1}{72}$	$-\frac{1}{72}$
13	$\frac{1}{169}$	$-\frac{2}{169}$	$-\frac{2}{169}$	$-\frac{2}{169}$
14	$\frac{1}{196}$	$-\frac{2}{196}$	$-\frac{1}{98}$	$-\frac{1}{98}$
15	$\frac{1}{225}$	$-\frac{2}{225}$	$-\frac{2}{225}$	$-\frac{2}{225}$
16	$\frac{1}{256}$	$-\frac{2}{256}$	$-\frac{1}{128}$	$-\frac{1}{128}$
17	$\frac{1}{289}$	$-\frac{2}{289}$	$-\frac{2}{289}$	$-\frac{2}{289}$
18	$\frac{1}{324}$	$-\frac{2}{324}$	$-\frac{1}{162}$	$-\frac{1}{162}$
19	$\frac{1}{361}$	$-\frac{2}{361}$	$-\frac{2}{361}$	$-\frac{2}{361}$
20	$\frac{1}{400}$	$-\frac{2}{400}$	$-\frac{1}{200}$	$-\frac{1}{200}$

## (b) $\frac{1}{x^3} = x^{-3}$

$x$	$y = x^{-3}$	$\frac{dy}{dx}$	$\frac{dy}{dx}$	$\frac{dy}{dx}$
1	1	-3	-3	-3
2	$\frac{1}{8}$	$-\frac{3}{8}$	$-\frac{3}{8}$	$-\frac{3}{8}$
3	$\frac{1}{27}$	$-\frac{3}{27}$	$-\frac{1}{9}$	$-\frac{1}{9}$
4	$\frac{1}{64}$	$-\frac{3}{64}$	$-\frac{3}{64}$	$-\frac{3}{64}$
5	$\frac{1}{125}$	$-\frac{3}{125}$	$-\frac{3}{125}$	$-\frac{3}{125}$
6	$\frac{1}{216}$	$-\frac{3}{216}$	$-\frac{1}{72}$	$-\frac{1}{72}$
7	$\frac{1}{343}$	$-\frac{3}{343}$	$-\frac{3}{343}$	$-\frac{3}{343}$
8	$\frac{1}{512}$	$-\frac{3}{512}$	$-\frac{3}{512}$	$-\frac{3}{512}$
9	$\frac{1}{729}$	$-\frac{3}{729}$	$-\frac{1}{243}$	$-\frac{1}{243}$
10	$\frac{1}{1000}$	$-\frac{3}{1000}$	$-\frac{3}{1000}$	$-\frac{3}{1000}$