MCR 3U

U4L1 Handout – Identifying Parent Functions

For each function listed, identify the **parent function**. For the tables, you may find it helpful to graph the points to determine the parent function.

1) $g(x)=\frac{4}{5}x^2-\frac{3}{5}x+\frac{1}{10}$

quad.

2) $h(x)=3|x-2|+5$

absolute value

3) $k(x)=\frac{3}{5}(x-2)+8$

linear

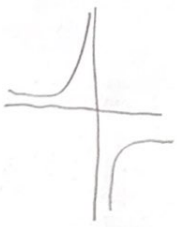
4) $m(x)=3\sqrt{4-x}+2$

Square root

5)

x	$n(x)$
-4	9
-3	12
-2	18
1	-36
4	-9
6	-6

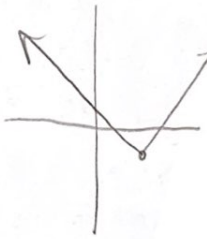
-36 -36 -36 -36



reciprocal

6)

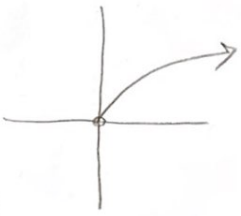
x	$g(x)$
-4	20
-2	14
0	8
2	-2
4	8
6	14



absolute value

7)

x	$h(x)$
0	0
2	1.5 ~1.4
8	3.0 ~2.8
18	4.5 ~4.2
32	6.0 ~5.6
50	7.5 ~7.1



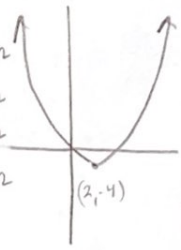
Square root

$y=0.098\sqrt{120x}$ using Desmos

8)

x	$k(x)$	
-2	20	-18
0	2	-6
2	-4	-6
4	2	6
6	20	18
8	50	30

12 12 12 12



quadratic

9)

x	$m(x)$
-1	-3
2	4.5
11	12
26	19.5
47	27
74	34.5

Square root

$y=2.84\sqrt{2.326(x+1)}-3$

using Desmos

10)

x	$n(x)$
-5	29
-1	22
3	15
7	8
11	1
15	-6

-7 -7 -7 -7 -7

linear

1) quadratic 2) absolute value 3) linear 4) square root 5) reciprocal
6) absolute value 7) square root 8) quadratic 9) square root 10) linear