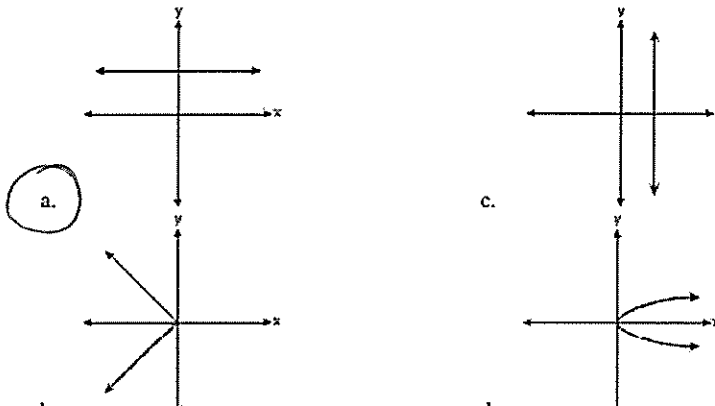
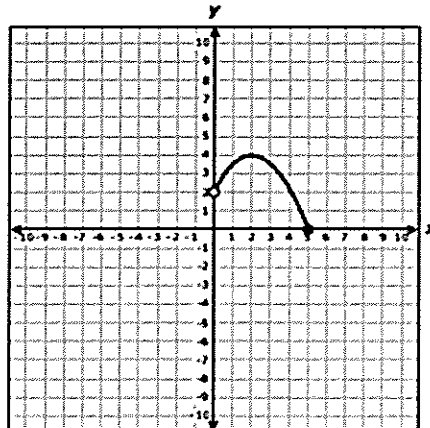


Year 11 Methods Week 3 Quiz

15

Name: _____

1.	True or False: A relation is a function. <i>False ✓</i>	1
2.	Which of the following is NOT a function? A $y = \frac{1}{x+3}$ (B) $x = y^2 - 7y + 1$ C $x^2 - y + 1 = 0$ D $3x - y - 1 = 0$	1
3.	Which graph represents a function? 	1
4.	What is the domain of the function graphed below?  (A) $0 < x \leq 5$ B. $2 < x \leq 5$ C. $0 < x \leq 4$ D. $0 < x < 2$	1

5.	<p>What is the range for the mapping below?</p> <div style="display: flex; align-items: center;"> <div style="margin-right: 20px;"> <p>Input Output</p> </div> <div> $R = \{-3, -1, 0, 2\}$ <p>✓ notation ✓ correct range</p> </div> </div>	4
6.	<p>What is the range of the function $f(x) = 5x + 4$ when the domain is $\{-2, 3, 5\}$</p> <p>$R = \{-6, 19, 29\}$ ✓✓ only penalise notation in Q5.</p>	2
7.	<p>If $f(x) = 5 - 7x$, then find:</p> <p>a) $f(-3) = 5 - 7(-3)$ $= 26$ ✓</p> <p>b) $f(x) = -2$ $5 - 7x = -2$ ✓ $-7x = -7$ $x = 1$ ✓</p>	3
8.	<p>The function $f(x) = \{(1, 2), (2, 4), (3, 6), (4, 8)\}$ can be represented in several other ways. Which is NOT a correct representation of the function $f(x)$?</p> <div style="display: flex; align-items: flex-start;"> <div style="margin-right: 20px;"> <p>a) </p> </div> <div style="margin-right: 20px;"> <p>b) </p> </div> <div> <p>c) x is a natural number less than 5 & y is twice x</p> <p>d) $y = 2x$ and the domain is $\{1, 2, 3, 4\}$</p> </div> </div>	1
9.	<p>Find the degree measure of the arc of a sector with area 36π if the area of the circle is 144π.</p> <div style="display: flex; justify-content: space-around;"> <div> $\frac{x}{360} \times 144\pi = 36\pi$ $\frac{x}{360} = \frac{36}{144} = \frac{1}{4}$ </div> <div> $x = \frac{1}{4} \times 360$ $= 90^\circ$ </div> </div>	3