

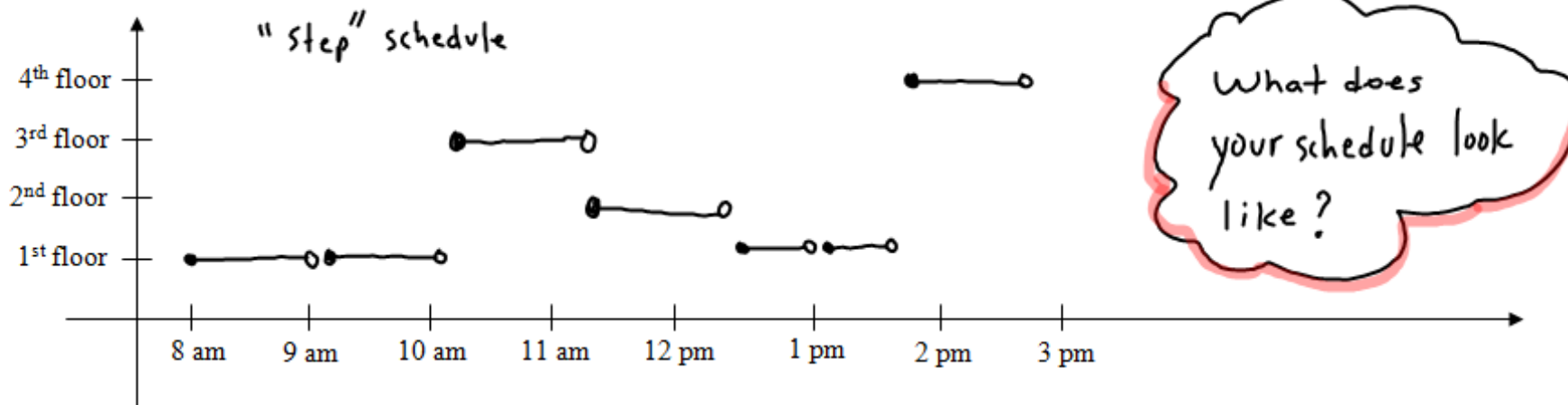
Introduction: Piecewise Schedule

10/11

Target 2B. Understand the relationship between an equation and its graph.

Using the graph below, draw a function that represents the floor you are on throughout the school day. The horizontal axis represents time and the vertical axis represents the floor. You may need to use the bell schedule at the bottom left of this page.

1)



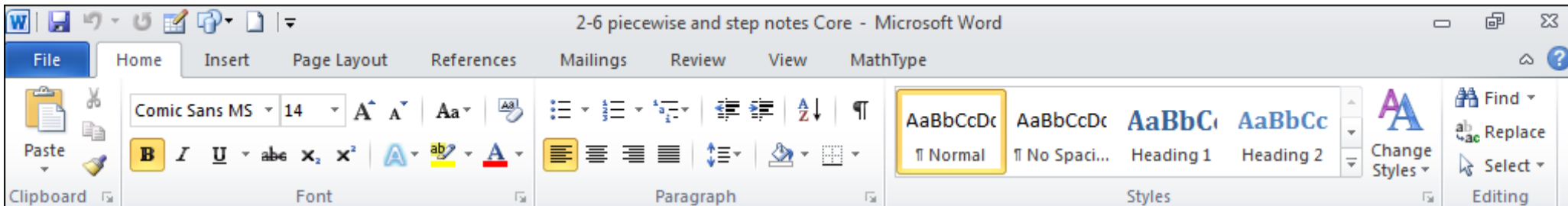
Period		Time
0		
1		8:00 – 9:00
2		9:05 – 10:05
3	A	10:10 – 10:40
	B	10:45 – 11:15
4	A	11:20 – 11:50
	B	11:55 – 12:25
5	A	12:30 – 1:00
	B	1:05 – 1:35
6		1:40 – 2:40
7		2:45 – 3:30

2) Using the graph above, finish this expression for a piecewise relation that represents h , for floor height.

	Floor	Time Condition
$h(t) =$	1	$t = 1^{\text{st}}$ Period
$h(t) =$	1	$t = 2^{\text{nd}}$ Period
$h(t) =$	3	$t = 3^{\text{rd}}$ Period
$h(t) =$	2	$t = 4^{\text{th}}$ Period
$h(t) =$	1	$t = 5^{\text{th}}$ Period
$h(t) =$	4	$t = 6^{\text{th}}$ Period

● - inside class

○ - outside class



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Step Function: a function whose graph is a series of horizontal line segments or rays.

$$5. f(x) = \begin{cases} -6, & -8 < x \leq -5 \\ -3, & -5 < x \leq -2 \\ 0, & -2 < x \leq 1 \\ 3, & 1 < x \leq 4 \\ 6, & 4 < x \leq 7 \end{cases}$$

↑
}

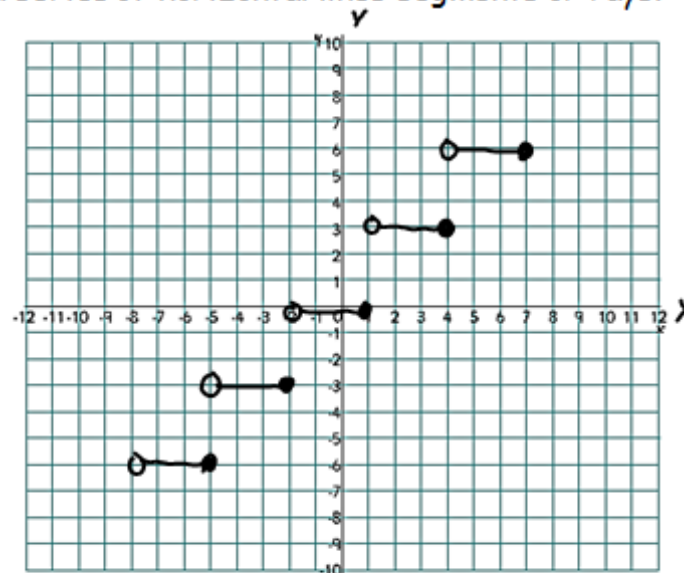
y
x

a
a

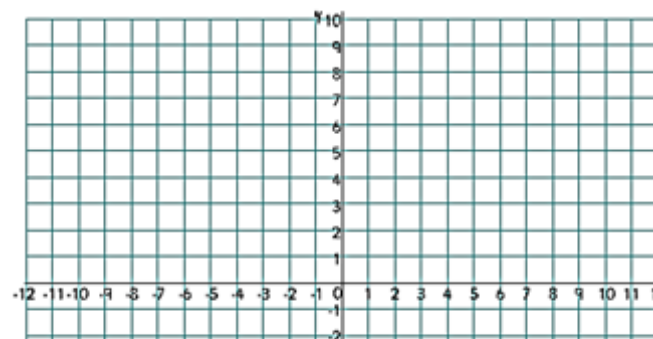
x
x

i
i

s
s



$$6. f(x) = \begin{cases} -4, & -5 < x \leq -2 \\ -2, & -2 < x \leq 1 \\ 0, & 1 < x \leq 4 \\ 2, & 4 < x \leq 7 \\ 4, & 7 < x \leq 10 \end{cases}$$



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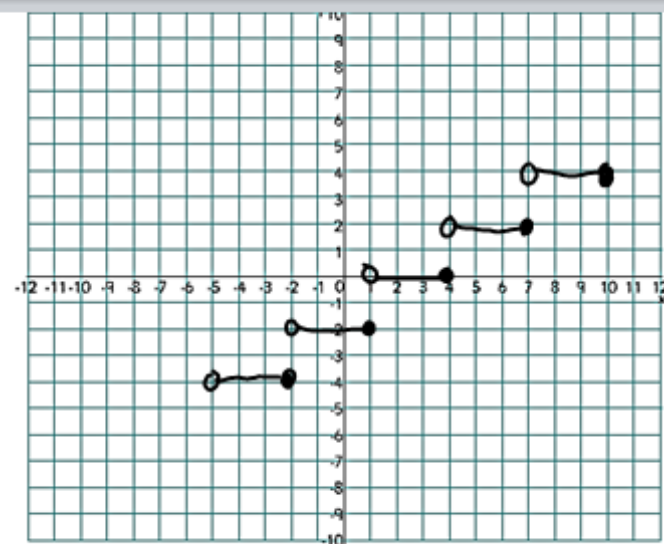
Paragraph

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$$6. f(x) = \begin{cases} -4, & -5 < x \leq -2 \\ -2, & -2 < x \leq 1 \\ 0, & 1 < x \leq 4 \\ 2, & 4 < x \leq 7 \\ 4, & 7 < x \leq 10 \end{cases}$$



$$7. f(x) = \begin{cases} -3, & -4 < x \leq -2 \\ -1, & -2 < x \leq 0 \\ 1, & 0 < x \leq 2 \\ 3, & 2 < x \leq 4 \\ 5, & 4 < x \leq 6 \end{cases}$$

