Lesson Plans for Amanda OMara for the week of 10/24/2016 (Page 1)

Mon 10/24	
Tue 10/25	

Wed 10/26

Wed 10/26
PoTD: Andrew won a cash prize on a game show. Andrew paid taxes of 30% on the original cash prize and had $28,000 remaining. How much was the original cash prize?
Skills:
a.) Use function notation to calculate output given input
b.) Use function notation to calculate input given output
c.) Complete an ordered pair given either an x or y value
d.) Convert equation to table and table to graph
e.) Determine if a coordinate pair is or is not a solution to an equation represented in function form, a table, or a graph
Agenda:
1.) Warm Up/This Day in History/Debrief WU [15]
2.) Problem of the Day [10]
3.) Intro
4.) I do:

a.) The formula for the area of a circle of radius r is $A = q(r) = \pi r^2$. Use the formula to evaluate $q(10)$ and $q(20)$. What do your results tell you about circles?

(Discussion here about what the "10" and "20" mean, in function notation)

b.) Use the cricket function $T = \frac{1}{4}R + 40$, introduced on page 3, to find the rate, R, at which the snowy tree cricket chirps, when the temperature, T, is $76°F$.

c.) (a) Using Table 2.2, evaluate $f(1)$, $f(-1)$, and $-f(1)$. (Write answer as ordered pair)

Table 2.2

x	-1	0	1	2
$f(x)$	0	-1	2	1

Complete Table 2.6 using

d.) $h(x) = x^5 - 5x^3 + 6x + 1$ and $j(x) = 2x + 1$. (and graph)

Table 2.6

x	-2	-1	0	1	2
$h(x)$					
$j(x)$					

e.) Ask questions about ordered pairs in "d"
5.) We do:
a.)
Let $h(x) = x^2 - 3x + 5$. Evaluate and simplify the following expressions.
(a) $h(2)$ (b) $h(a - 2)$ (c) $h(a) - 2$ (d) $h(a) - h(2)$

b.) (rewrite with function from "a" in "I do":)
Let $A = q(r)$ be the area of a circle of radius r, where r is in cm. What is the radius of a circle whose area is 100 cm^2?

Using Figure 2.4, fill in Table 2.4.

Table 2.4

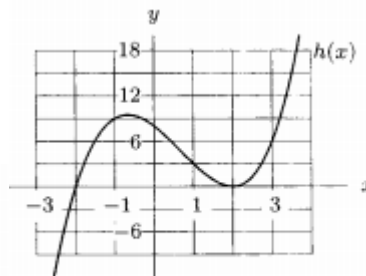| x	-2	-1	0	1	2	3
$h(x)$						

Figure 2.4

c.) (and write answers as ordered pairs)

Table 2.5

x	-2	-1	0	1	2
$f(x)$					
$g(x)$					

Complete Table 2.5 using $f(x) = 2x(x-3) - x(x-5)$ and $g(x) = x^2 - x$.

d.) (and graph)
e.) Ask questions about ordered pairs in "d"
6.) You do: "Evaluating Functions" Classwork/Homework
7.) Exit Ticket: $f(x) = x^2 + 2x + 1$. Complete table for given x values, write solutions as ordered pairs, and graph. Is (1, 7) a solution to the function?

Thu 10/27

Thurs 10/27
PoTD: A proofreader can read 40 pages in one hour. How many pages can this proofreader read in 90 minutes?
Skills:
Use function notation to solve real world problems involving evaluating expressions and functions
Agenda:
1.) Warm Up/This Day in History/Debrief WU [15]
2.) Problem of the Day [10]
3.) Debrief HW [10]
4.) Intro discourse (springboard from HW): Talk about problem #33. What did you notice/what did you wonder? What did you discover? What lingering questions do you have? [10]
5.) I do/We do [30]: Discovery/discourse lesson with whiteboards and Desmos on this task:
https://www.illustrativemathematics.org/content-standards/HSF/IF/B/4/tasks/386
7.) You do: Collaborative work with this task: [10]
https://www.illustrativemathematics.org/content-standards/HSF/IF/B/4/tasks/387
8.) Exit Ticket: 3-2-1 Exit Ticket [5]

Fri 10/28

Fri 10/28
PoTD: There are 16 ounces in one pound. If 3.4 pounds of beef cost $4.95, what is the cost per ounce, to the nearest cent?
Skills:
Use function notation to solve real world problems involving evaluating expressions and functions
Agenda:
1.) Warm Up/This Day in History/Debrief WU [15]
2.) Problem of the Day [10]
3.) Weekly Quiz (Combo from last week and this week) [20]
4.) Intro discourse: SUHUPU How far did your group get on the task yesterday? [5]
(Task: https://www.illustrativemathematics.org/content-standards/HSF/IF/B/4/tasks/387)
5.) Yesterday's task gallery walk [5]
6.) Productive struggle as a group [10]
7.) Final share out/teacher clean up [10-20 depending]
8.) Exit Ticket: Weekly Reflection