

Answer Key

Challenge: Skills and Applications

1.

<i>Input</i>	<i>Output</i>
1	4.9
1.25	6.65
2.35	14.35
2.8	17.5
3	18.9

2.

<i>Input</i>	<i>Output</i>
1	9.4
1.25	9.45
2.35	9.67
2.8	9.76
3	9.8

3.

<i>Input</i>	<i>Output</i>
1	0.3
1.25	0.8625
2.35	4.8225
2.8	7.14
3	8.3

4.

<i>Input</i>	<i>Output</i>
1	0.18
1.25	0.36125
2.35	1.90125
2.8	2.88
3	3.38

5. range: 0.18, 0.36125, 1.90125, 2.88, 3.38

6. function: there is only one amount of sales tax for each purchase amount 7. not a function; the change could be an increase or a decrease, making two possible temperatures resulting from one initial temperature 8. function: for each year there is only one number of days

9. range: 365 and 366 10. $y = x^2 + 3$

11. $y = \frac{12}{x}$