ANSWER KEY: Worksheets 6.1, 6.2, 6.3

Worksheet 6.1: "Veggie-Tables"

1.	Sweet Potato Variety	Tons per Acre Harvested by Farm
	Tuber-ific	3, 6, 11, 11, 19, 27, 34
	Terrific Taters	0, 3, 8, 16, 16, 18, 22, 42

2. Tuber-ific range: 31 (34 – 3) Terrific Taters range: 42 (42 – 0)

NOW TRY THIS: The two farms reporting 3 tons and 34 tons would not affect the range because these results are within the current range. The farm reporting 0 tons would increase the range from 31 to 34(34-0).

Worksheet 6.2: "Those Are Some Mean Brussels Sprouts!"

1. First, rearrange the data in ascending order:

Brussels Sprouts Variety	Yield per Acre (in Pounds)	
Belgian Boy	0; 200; 200; 800; 1,200; 1,500; 1,595	
Green Goddess	400; 450; 700; 850; 900; 900; 1,200; 1,600	
Jade Giant	200; 300; 500; 500; 700; 1,200; 1,200; 2,600	

Belgian Boy:

Mean: 785 [(0 + 200 + 200 + 800 + 1,200 + 1,500 + 1,595)/7] Median: 800 Mode: 200 Range: 1,595 (1,595 - 0)

Green Goddess:

Mean: 875 [(400 + 450 + 700 + 850 + 900 + 900 + 1,200 + 1,600)/8] Median: 875 [(850 + 900)/2] Mode: 900 Range: 1,200 (1,600 - 400)

Jade Giant:

Mean: 900 [(200 + 300 + 500 + 500 + 700 + 1,200 + 1,200 + 2,600)/8] Median: 600 [(500 + 700)/2] Mode: 500 and 1,200 Range: 2,400 (2,600 - 200)

 Although Jade Giant has the highest mean, Green Goddess has the highest median and is the better choice. Jade Giant's mean is skewed by one large result.

NOW TRY THIS: 905 pounds (800 x 8 = 6,400. Prior mean of 785 x 7 = 5,495. 6,400 - 5,495 = 905.)

Worksheet 6.3: "Stuck in the Middle"

•	Vegetables	Mean	Median	Mode
	Daikon Radishes	\$250	\$250	\$250
	Sweet Potatoes	\$350	\$375	\$500
	Baby Arugula	\$375	\$450	none
	Heirloom Rutabagas	\$300	\$100	\$100

- 2. Median would be the best measure to use because the onetime order of \$1,200 inflated the mean.
- 3. Sweet potatoes and baby arugula have the highest median sales.

NOW TRY THIS: The range for sweet potatoes = \$400 while the range for rutabagas = \$1,100. This indicates that there is more variability in the sales of rutabagas and greater dependability in the sales of sweet potatoes, especially since median sales are higher for sweet potatoes.

For Online Materials, Visit: www.actuarialfoundation.org/cultivatingdata