**Short Run Cost Production Continued**

**1. Which of the following best describes why the marginal cost curve slopes upward?**

1. Specialization and the division of labor change the costs a firm faces.
2. Increasing returns to inputs create increasing costs.
3. People get less and less additional satisfaction from each unit of consumption.
4. The income effect overtakes the substitution effect.
5. Production functions with diminishing marginal returns yield upward sloping marginal cost curves.

**2. When a firm’s only variable input is labor, the average variable cost**(AVC)**:**

1. rises when the marginal product of labor rises.
2. is lowest when the marginal product of labor is highest.
3. falls when the average product of labor falls.
4. rises when the average product of labor rises.
5. is lowest when the average product of labor is highest.

3. Ulterior Votives, LLC produces candles in a perfectly competitive market. It has a production function that exhibits diminishing marginal product. Which of the following best describes this firm’s short-run marginal cost curve (MC)?

1. *MC* slopes downward as output increases for all quantities produced.
2. *MC* slopes downward and becomes steeper as output increases.
3. MC is constant for all quantities produced.
4. *MC* slopes upward as output increases.
5. *MC* is horizontal.

4. Kananelo Enterprises’ average total cost curve (ATC) has shifted up, but its average variable cost curve (AVC) and marginal cost curve (MC) haven't changed. Which of the following would cause the change in ATC, but not affect AVC or MC?

1. an improvement in productivity
2. a decline in productivity
3. a tax on a variable cost of production
4. a decrease in average fixed costs
5. a tax on a fixed cost of production

5. Tuma Unlimited produces noodles in a perfectly competitive market. Its average total costs, marginal costs, and average variable costs have all decreased, but its average fixed costs haven't changed. Which of the following would cause these changes?

1. an improvement in productivity
2. a tax on fixed costs
3. a tax on variable costs
4. a subsidy on fixed costs
5. an increase in fixed costs

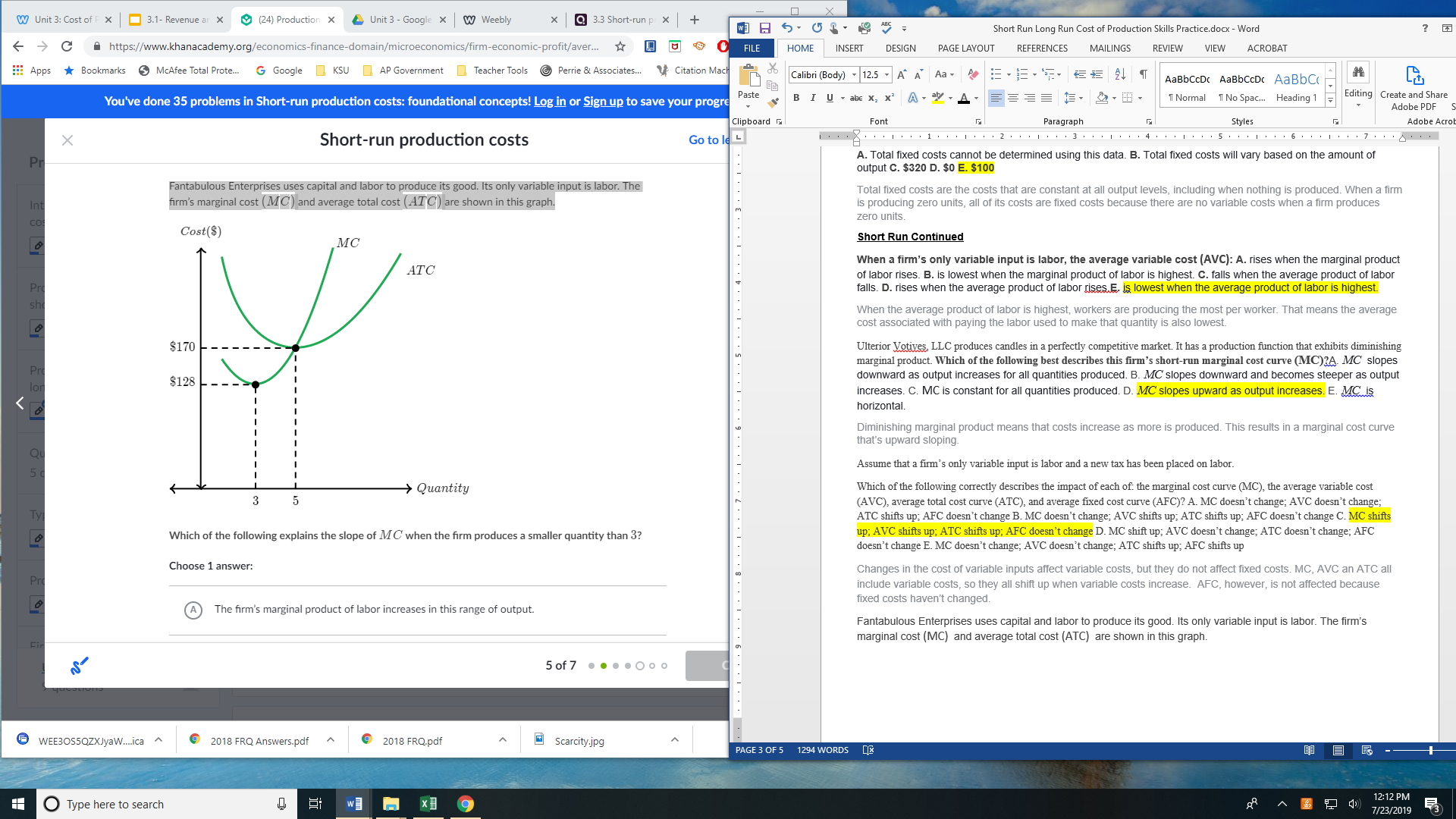
6. Assume that a firm’s only variable input is labor and a new tax has been placed on labor. Which of the following correctly describes the impact of each of: the marginal cost curve (MC), the average variable cost (AVC), average total cost curve (ATC), and average fixed cost curve (AFC)?

1. MC doesn’t change; AVC doesn’t change; ATC shifts up; AFC doesn’t change
2. MC doesn’t change; AVC shifts up; ATC shifts up; AFC doesn’t change
3. MC shifts up; AVC shifts up; ATC shifts up; AFC doesn’t change
4. MC shift up; AVC doesn’t change; ATC doesn’t change; AFC doesn’t change
5. MC doesn’t change; AVC doesn’t change; ATC shifts up; AFC shifts up

**7. Which of the following statements is true about the relationship between marginal cost (MC) and averag**e **total cost**(ATC**)**?

1. If MC equals ATC, then ATC is at its maximum
2. If MC less than ATC, then ATC is decreasing
3. If MC is less than ATC, then ATC is minimized
4. If MC is greater than ATC, the average variable cost and ATC are moving farther apart
5. If MC is greater than ATC, then MC is decreasing

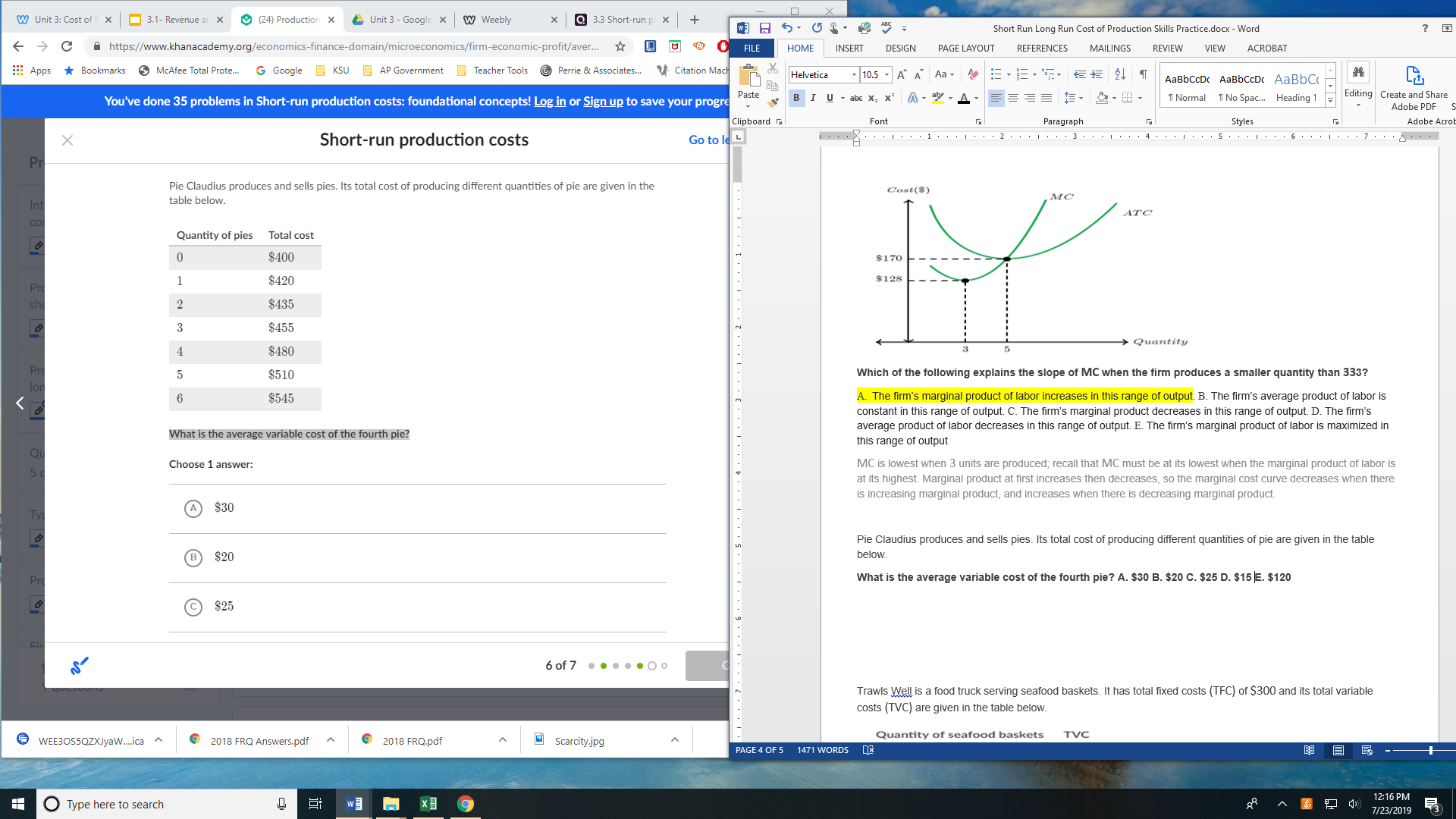
Fantabulous Enterprises uses capital and labor to produce its good. Its only variable input is labor. The firm’s marginal cost (MC) and average total cost (ATC)  are shown in this graph.



**8. Which of the following explains the slope of**MC **when the firm produces a smaller quantity than**3**?**

1. The firm’s marginal product of labor increases in this range of output.
2. The firm’s average product of labor is constant in this range of output.
3. The firm’s marginal product decreases in this range of output.
4. The firm’s average product of labor decreases in this range of output.
5. The firm’s marginal product of labor is maximized in this range of output

Pie Claudius produces and sells pies. Its total cost of producing different quantities of pie are given in the table below.

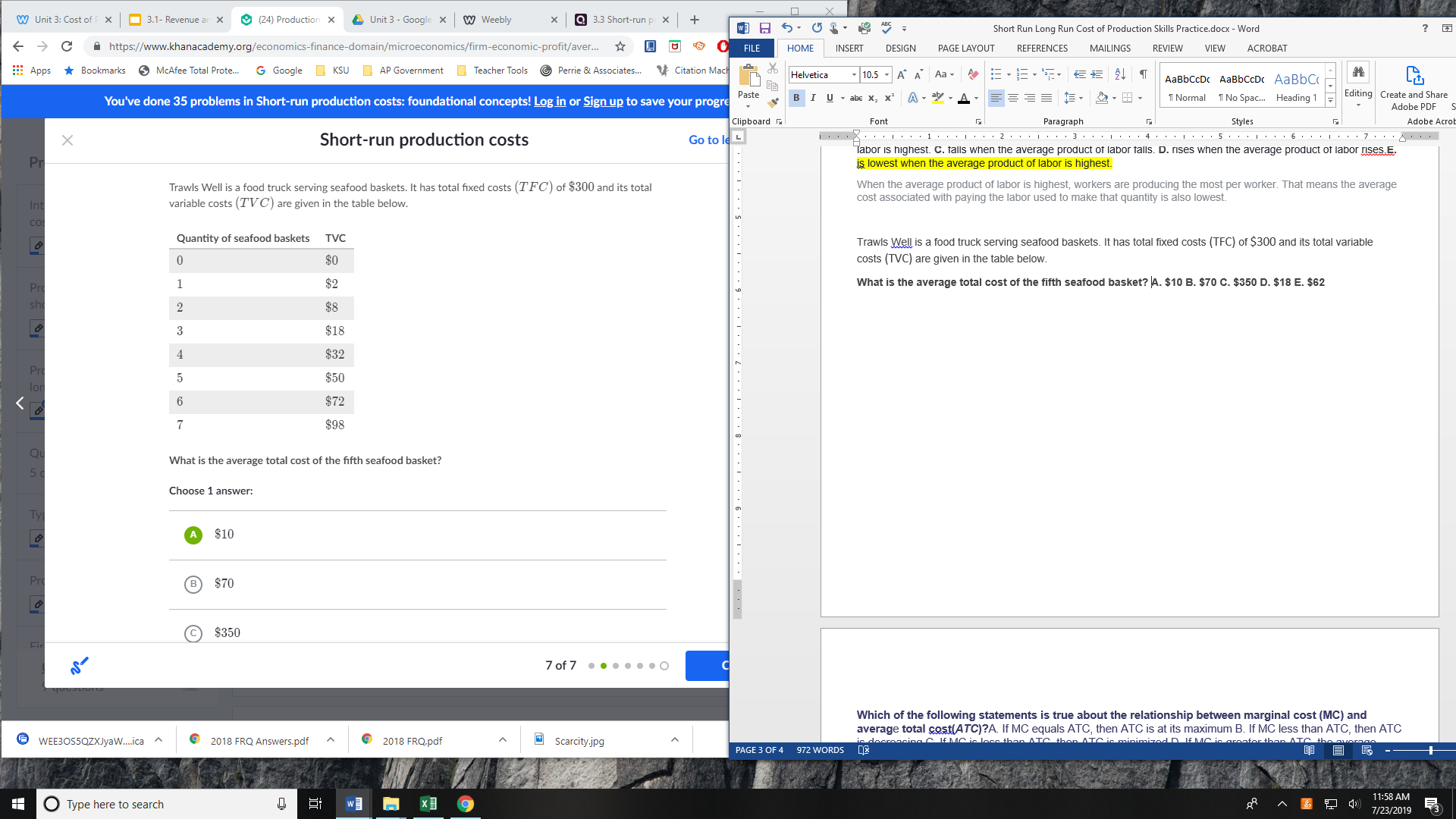


**9. What is the average variable cost of the fourth pie?**

1. **$30**
2. **$20**
3. **$25**
4. **$15**
5. **$120**

Use the information below to answer question 10 and 11.

Trawls Well is a food truck serving seafood baskets. It has total fixed costs (TFC) of $300 and its total variable costs (TVC) are given in the table below.



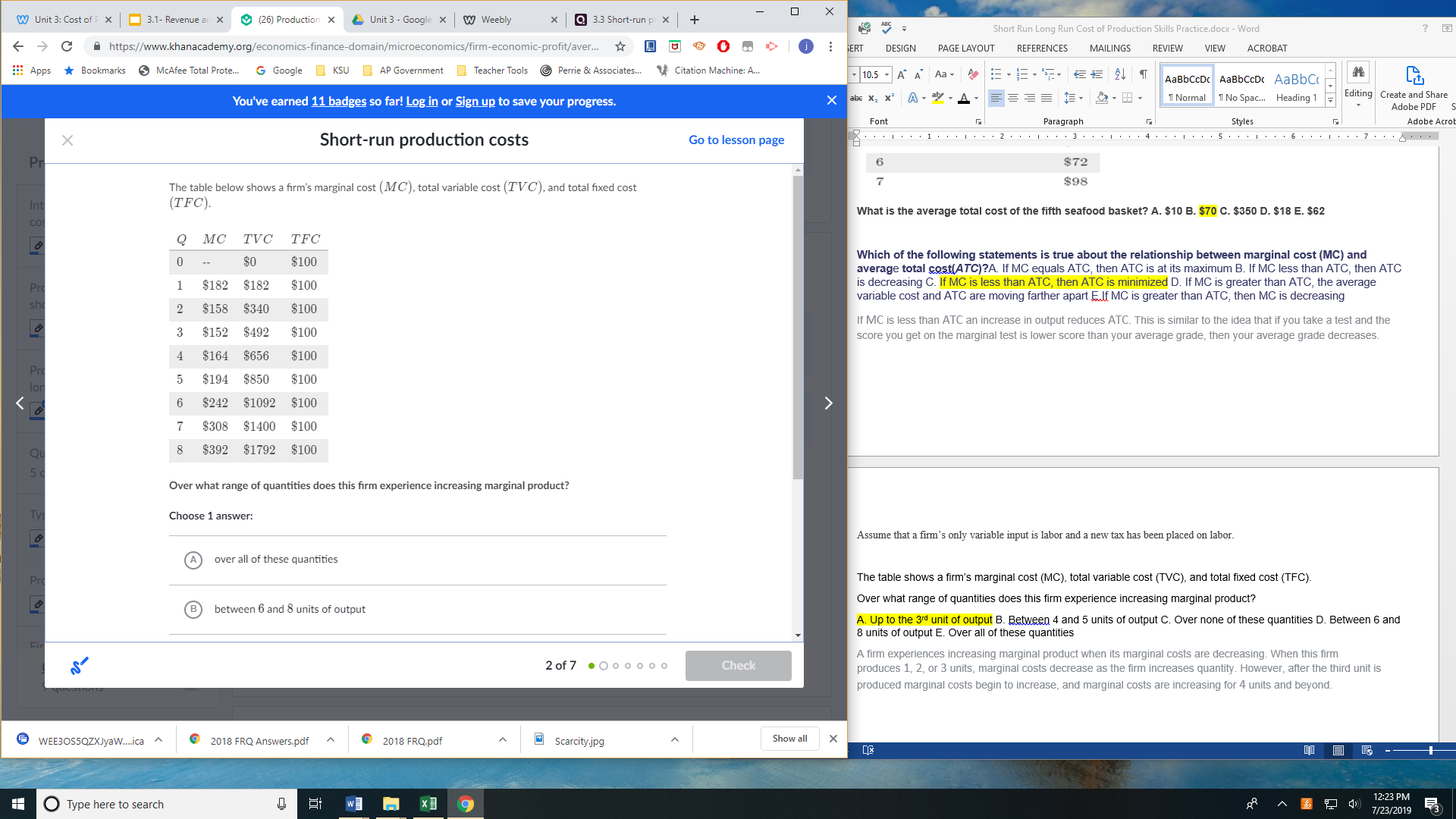
**10. What is the average total cost of the fifth seafood basket?**

1. **$10**
2. **$70**
3. **$350**
4. **$18**
5. **$62**

**11. What is the marginal cost**(MC) **of the fifth seafood basket?**

1. **$50**
2. **$18**
3. **$22**
4. **$70**
5. **$12**

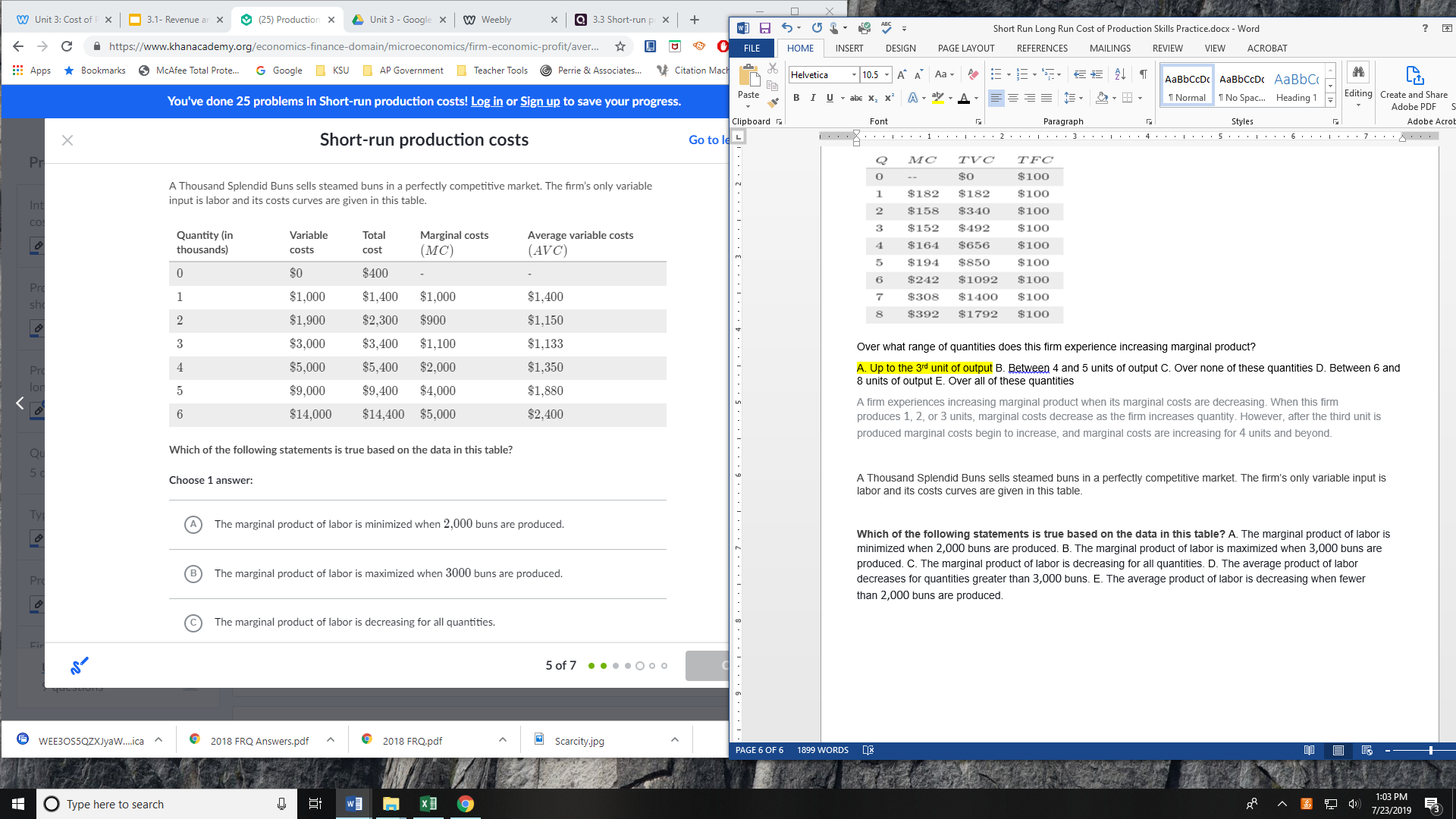
The table shows a firm’s marginal cost (MC), total variable cost (TVC), and total fixed cost (TFC).



12. Over what range of quantities does this firm experience increasing marginal product?

1. Up to the 3rd unit of output
2. Between 4 and 5 units of output
3. Over none of these quantities
4. Between 6 and 8 units of output
5. Over all of these quantities

A Thousand Splendid Buns sells steamed buns in a perfectly competitive market. The firm’s only variable input is labor and its costs curves are given in this table.



**13. Which of the following statements is true based on the data in this table?**

1. The marginal product of labor is minimized when 2,000 buns are produced.
2. The marginal product of labor is maximized when 3,000 buns are produced.
3. The marginal product of labor is decreasing for all quantities.
4. The average product of labor decreases for quantities greater than 3,000 buns.
5. The average product of labor is decreasing when fewer than 2,000 buns are produced.