

Lesson 5: Quiz 4 – Number Patterns in Sequence

Directions: These sequences use two functions. Find the missing numbers.

$\begin{array}{cccc} +5 & +4 & +5 & +4 \\ \wedge & \wedge & \wedge & \wedge \end{array}$

Example 3, 8, 12, 17, 21, 26, 30, 35, 39 (rule: + 5, + 4)

$\begin{array}{cccc} -1 & +4 & -1 & +4 \\ \wedge & \wedge & \wedge & \wedge \end{array}$

1) 7, 6, 10, 9, 13, _____, _____, 15, 19 (rule: - 1, + 4)

$\begin{array}{cccc} +5 & -2 & +5 & -2 \\ \wedge & \wedge & \wedge & \wedge \end{array}$

2) 10, 15, 13, 18, 16, _____, _____, 24, 22 (rule: + 5, - 2)

3) 2, 10, 8, 16, 14, 22, _____, _____, 26, 34 (rule: _____, _____)

4) 1, 12, 11, 22, 21, 32, 31, _____, _____ (rule: _____, _____)

5) 12, 16, 15, 19, 18, 22, _____, _____ (rule: _____, _____)

6) 10, 20, 19, 29, 28, 38, _____, _____ (rule: _____, _____)

7) Maria opens a savings account. She deposits \$10 every week. Her husband withdraws \$3 every week. Using a number pattern, what is the balance in the savings account after ten weeks? _____

8) Maria invests \$100 per month. Her investment company charges \$5 every quarter (every three months) to manage the account. What is Maria's investment balance after one year? _____

9)



Maria owns a fruit stand. She orders 125 watermelons every week and 175 bags of apples. She donates five bags of apples and two watermelons to a local food shelter every week. How many watermelons does she have to sell each month? (Assume there are four weeks in a month) _____

10) Sara sets a 16-ounce glass of water out in the sun. Every six hours, .25 ounces of water evaporates. If the water is left out for 2 days (48 hours), how much water will be left? _____

11) Juan earns \$1500 a month. He also works a weekend job where he makes \$100 per weekend (four weekends per month). Every quarter (every three months), Juan pays \$350 in taxes. How much money will Juan have in six months? _____