

1. List two things you can learn from a peripheral's functional description in the peripheral reference manual?
 - a. Explanation of the purpose of each operating mode
 - b. Basic theory of operation
2. What is the title of the first sub-section in the functional description of timers 2 and 3?
 - a. Time-base unit
3. What is the purpose of the Prescaler (PSC) register?
 - a. The PSC register divides the input clock frequency to the timer
4. What is the purpose of the Auto-Reload (ARR) register?
 - a. the value in the ARR register is the trigger point at which the timer resets and begins to count a new period
5. What is the purpose of the Capture/Compare (CCRx) register while the timer is operating in Output Compare mode?
 - a. The output compare mode modifies the output of a GPIO pin whenever the timer's counter matches the value stored in the CCRx register
6. What does the duty-cycle of a PWM signal represent?
 - a. f approximating an analog signal using only digital hardware
7. What is the purpose of the Alternate Function mode for a GPIO pin?
 - a. Allowing a pin to connect directly to internal peripherals of the STM32F0 is the purpose of the alternate function mode
8. In what document can you find the documentation for what GPIO pins have which alternate functions?
 - a. The peripheral reference manual