

LAB 11 QUESTIONS

Group: _____ Names: _____

(1) Did your circuit work the first time, without modifications? If not, what things did you try from Section 11.4? Which things worked, and why do you think they worked?

(2) Explain in detail how you think the Pot command works.

(3) In the PWM.bas program, we used 30,000 microseconds for the PWM period. What frequency f (in Hz) does this correspond to?

- (4) How would the motor respond to a very low (close to 0%) duty cycle PWM signal?

How would changing the PWM signal frequency f (i.e., making it much lower or much higher) change the motor response?

- (5) What would happen if other keys (besides the 1-key, 4-key, and *-key) are pressed down during the keypad loop?

What would happen if two of the three valid keys are pressed and held down at once (e.g., the 1-key and the *-key)?

- (6) In PicBasic Pro, to what values would the following expressions evaluate? Hint: PicBasic Pro uses integer division and performs one operation at a time.

a) $2 / 3 * 4$

b) $2 * 4 / 3$