**List of functions for autonomous programming**

**Drive class:**

All functions are called with drive object

Ex: drive.functionName()

drive.autoCrabDrive(double distance, double heading, double speed)

Drives in any direction, but robot orientation remains the same

Speed must be positive (0 to 1)

Returns status

drive.autoAdjustWheels(double angle)

Faces all wheels in a given direction without moving the robot

Usually called before driving to get the wheels started in the correct direction

Returns status

drive.autoRotate(double angle)

Faces robot in a given direction

Angle is absolute; it’s based on where the robot started, not where it is now

Returns status

**Grabber class:**

All functions are called with grabber object

Ex: grabber.functionName()

grabber.grabberDeploy()

Brings grabber down

grabber.grabberRetract()

Brings grabber up

grabber.deployRetract()

Toggles the grabber position – normally not used; other functions are more specific

grabber.setGrabberMotor(GrabberDirection dir)

Sets grabber motor to preset speed

Must use these variables as arguments:

GrabberDirection.INTAKE or

GrabberDirection.EXPEL or

GrabberDirection.OFF

**Auto class:**

We are working in the auto class, so no object is needed

Ex: functionName()

Most of these functions are larger routines themselves

autoDelay(long milliseconds)

Returns CONT until the given amount of time has passed, then returns DONE

Note- the long datatype is an int, just with a larger amount of storage space

Just type in a whole number of milliseconds

Returns status

autoShoot(ShootLocation location, int numBalls)

Shoots given number of balls with power based on the shooting location

Must use these variables as arguments for ShootLocation:

ShootLocation.HIGH\_SHOT or

ShootLocation.LOW\_SHOT or

ShootLocation.LAUNCH\_PAD or

ShootLocation.AUTO\_RING or

ShootLocation.OFF (don’t use this one)

Returns status