Heart Rate Formula (works for most people)

220 minus Your Age = Max. HR (Your theoretical maximum heart rate)
Then take that maximum HR and multiply it times .6 for 60%; .65 for 65%; .7 for 70% and so on.

Example for a 30 year old: 220 - 30 = 190

60% = 190 X .6 = 114 (11.5 beats per 6-second count, round off to 11)
65% = 190 X .65 = 123.5 (12.5 beats per 6-second count, round off to 12)
70% = 190 X .7 = 133 (13.5 beats per 6-second count, round off to 13)
75% = 190 X .75 = 142.5 (14 beats per 6-second count)
80% = 190 X .8 = 152 (15 beats per 6-second count)
85% = 190 X .85 = 161.5 (16 beats per 6-second count)

For practical purposes when taking your heart rate during exercise, the following is suggested:
Round the numbers off to the nearest 10 and error on the conservative.

To understand how heart rate plays a role in exercise, think in terms of heart rate zones. All workouts begin with a warm-up zone at 60-65% of maximum heart rate. Your warm-up prepares you for your workout (conditioning zone) where you maintain 65-80%. For the cool-down zone, slow back down to 60-65%.

Here's the heart rate (HR) range for a 30-year old:

WARM-UP ZONE: (Do this first for 7-10 minutes or more, depending on the temperature.)
60-65%. 114-123 or 11-12 beats per 6-second count. Effort should feel EASY.

CONDITIONING ZONE: (This is AFTER you are good and warmed up):
65-80%. 123-152 or 12-15 beats per 6-second count. Effort feels COMFORTABLE.

Your effort at the higher end of this 65-80% range will FEEL more challenging than it will at the lower end of the range. In other words, 75% will feel harder than 65%. Learn to know what it FEELS like. On most days, you'll want to stay in the lower end of this range because that's what feels right. On some days, progressing to the upper end of the zone will feel good.

COOL-DOWN ZONE: (End each exercise session with a nice, easy cool-down.)
60-65%. 114-123 or 11-12 beats per 6-second count. Effort should feel EASY again.