

# KARVONEN FORMULA TO DETERMINE TARGET HEART RATE

Karvonen Formula is a mathematical formula that helps you determine your target heart rate zones. Staying within this range will help you work most effectively during your cardio workouts depending on your training and health goals.

## STEP 1: DETERMINE YOUR RESTING HEART RATE (RHR)

Take your resting pulse for 1 min. just after waking up (without an alarm) and before you've moved. Most people find it easier to check it for 30 seconds and multiple that number by 2

$$\frac{\text{_____}}{\text{(Ck your HR for 30 sec)}} \times \frac{2}{2} = \frac{\text{_____}}{\text{= (RHR for 1 min.)}}$$

## STEP 2: CALCULATE ESTIMATED MAXIMUM HEART RATE (eMHR)

$$\frac{220}{220} - \frac{\text{_____}}{\text{(age)}} = \frac{\text{_____}}{\text{(eMHR)}}$$

## STEP 3: CALCULATE HEART RATE RESERVE (HRr)

$$\frac{\text{_____}}{\text{(eMHR)}} - \frac{\text{_____}}{\text{(RHR)}} = \frac{\text{_____}}{\text{(HRr)}}$$

## STEP 5: CALCULATE 70% and 85% of aMHR, ADD TO RHR to get LOW/HIGH TARGET ZONES

$$\frac{\text{_____}}{\text{(HRr)}} \times \frac{.70}{.70} = \frac{\text{_____}}{\text{(70 \% of HRr)}} + \frac{\text{_____}}{\text{(RHR)}} = \frac{\text{_____}}{\text{LOW END TARGET ZONE}}$$

$$\frac{\text{_____}}{\text{(HRr)}} \times \frac{.85}{.85} = \frac{\text{_____}}{\text{(85 \% of HRr)}} + \frac{\text{_____}}{\text{(RHR)}} = \frac{\text{_____}}{\text{HIGH END TARGET ZONE}}$$

## STEP 6: CALCULATE 60% of HRr, ADD TO RHR

$$\frac{\text{_____}}{\text{(HRr)}} \times \frac{.60}{.60} = \frac{\text{_____}}{\text{(60 \% of HRr)}} + \frac{\text{_____}}{\text{(RHR)}} = \frac{\text{_____}}{\text{HIGHER FAT BURNING ZONE}}$$