

# Heart Rate Calculation Using ECG Paper Cheat Sheet

## Estimated Normal Heart Rate in Dogs and Cats



### Dog

#### Adults:

60 to 160 bpm

(large and/or relaxed dogs have slower heart rates)

#### Puppies:

up to 220 bpm

#### Under anesthesia:

60 to 150 bpm



### Cat

#### Adults and Kittens in the hospital:

140 to 220 bpm

(up to 240 bpm if very stressed)

#### Adults and Kittens relaxed at home:

100 to 140 bpm

#### Under anesthesia:

120 to 180 bpm

## How to Calculate Heart Rate Using ECG Paper

USING THE 6 SECOND METHOD (can be used for regular or irregular rhythms)

### Step 1:

- Mark a 6 second interval:
  - (i) 30 of the 5 mm squares (150 mm) @ 25 mm/sec, or
  - (ii) 60 of the 5 mm squares (300 mm) @ 50 mm/sec

### Step 2:

- Count the number of QRS complexes during this interval

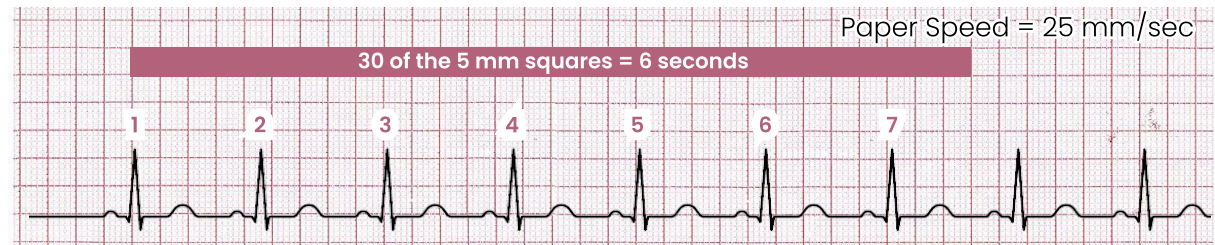
### Step 3:

- Number of QRS complexes x 10 = beats per minute (bpm)

## 6 Second Interval

Distance ÷ Speed = Time

- (i) 150 mm ÷ 25 mm/sec = 6 sec
- (ii) 300 mm ÷ 50 mm/sec = 6 sec



7 × 10 = 70 bpm (interval technically between 7 and 8 QRS complexes; between 70 and 80 bpm)



See the *Vetpocket app* for more detailed reference material!

