

p. 386 #4 (a) Right $0 \leq t < 1$
 Left $1 < t < 2$
 Stopped $t=1, 2$

(b) 4; 7 (c) 6

#6 (a) Right $0 \leq t < 4$

Left: never

Stopped: $t=4$

(b) $16/3$; $25/3$

(c) $16/3$

Logistic model: (DEQ)

Solution:

$$\frac{dP}{dt} = \frac{2(30P - P^2)}{10}$$

$$= \frac{2}{10} P(30 - P)$$

$$k = \frac{2}{10} \quad M = 30$$

$$\frac{dP}{dt} = kP(M - P)$$

then $P(t) = \dots$

$$\lim_{t \rightarrow \infty} P(t) = \underline{M}$$

