

&

:

-

,

:

-

μ

-

μ

μ

μ

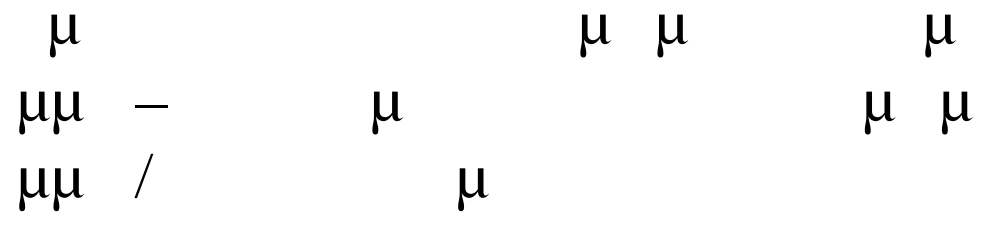
$\mu\mu$

μ



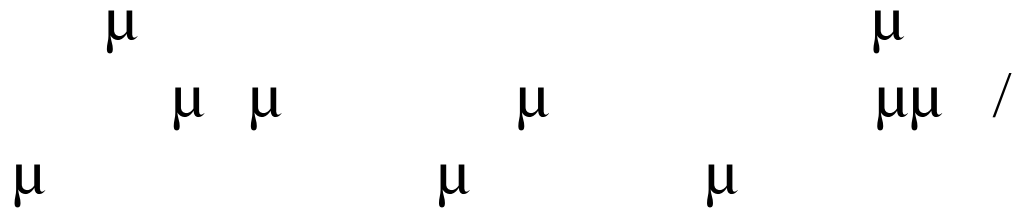
•

(Sp1)



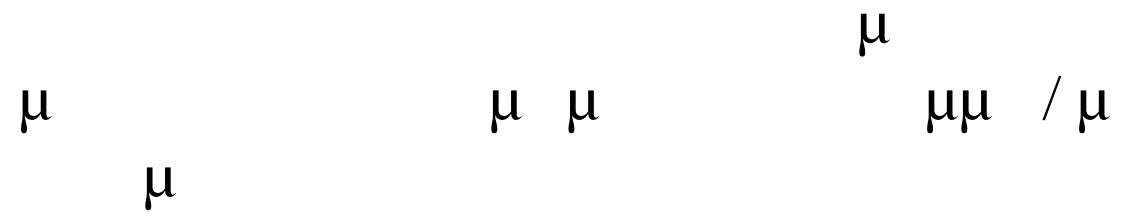
•

(Sp2)



•

(Sp3)



(Sp1)

Sp1 -

•

μ

•

μ

μ

•

μ

(Sp1)

Sp1 -

•

μ

μ

μ

•

μ

•

μ

μ

μ

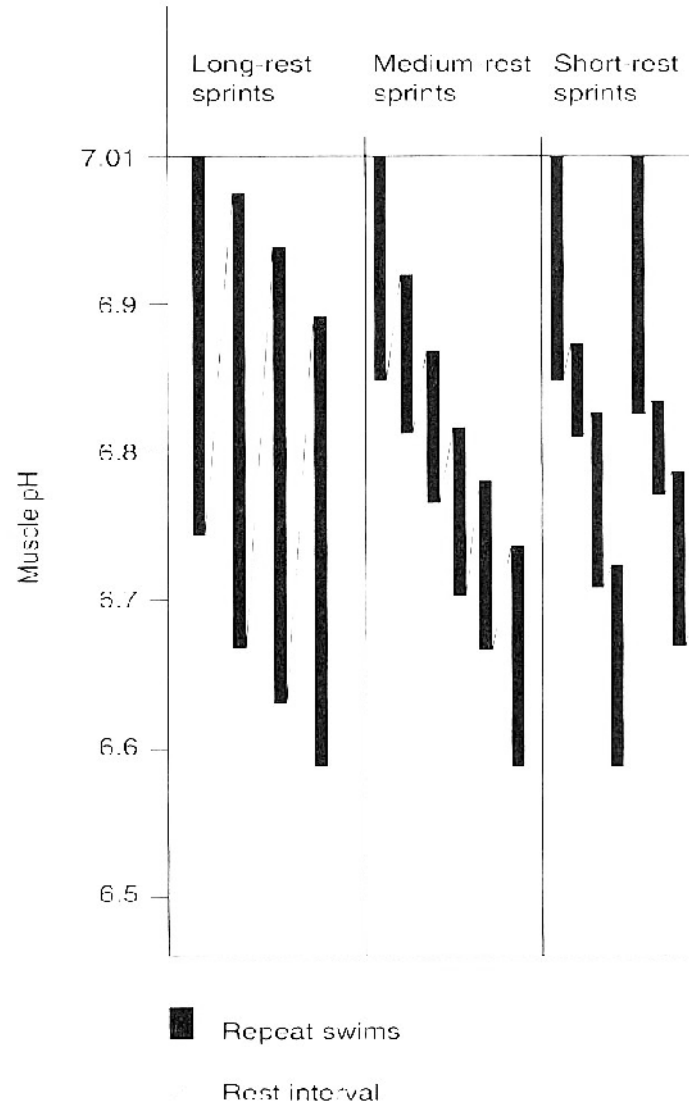
(Sp1)

-
- $\mu \mu \quad \mu\mu$ /
 - $\mu \mu \quad \mu\mu$ /
 $\mu\mu \quad \mu \quad \mu \quad (\mu \quad) \quad ,$
 - $\mu \mu \quad \mu\mu$ /
 $\mu\mu \quad \mu \quad \mu$

(Sp1)

Ph μ Sp1 μ μ , μ

μ μμ



(Sp1)

_____ μ μ μ _____ $\mu\mu$

- 300 - 800 μ .

- 100-200 μ .

- $\mu\mu$
5-10'

- μ

6'' >	100
12'' >	200

(Sp1)

_____ μ μ μ _____ $\mu\mu$

•

600 - 1200 μ .

•

μ

μ

(25 – 100 μ .)

•

$\mu\mu$

15-60'' (25_15'' / 50_15-30'' / 75_30-40'' / 100_45-60'')

•

μ

μ

μ

(Sp1)

_____ μ μ μ $\mu\mu$

•

μ

•

1/4 μ

•

5-15'' $\mu\mu$

•

(μ μ μ)
 μ

(μ μ μ)

μ

(Sp1)

_____ μ

4 - 6 μ

μ μ

μ μ μ

1
1-2

μ μ
 μ

, μ 4 - 6

μ

2 - 3 μ

(μ) ,

*

μ , μ $\mu\mu$

, μ

μ

(Sp1)

$\frac{\mu\mu}{4 \times 3 \times 25} \quad 20'' \text{ (14-17''} \quad 25 \quad)$
 $\mu \quad 225\mu. \quad \mu$

$4 \times 6 \times 50 \quad 45'' \text{ (33-38''} \quad 50 \quad)$
 $\mu \quad 200\mu. \quad \mu$

$\frac{\mu}{4 \times}$
 $200 \text{ (} \quad) \quad 3'$
 $4 \times 100 \text{ (} \quad) \quad 2'$

μ

(Sp1)

μ ————— $\mu\mu$

4 x

100 () 2'

4 x 100 () 1:40

μ —————

100

2'

μ

100

/

100

/

100

6'

(Sp2)

Sp2 -

•

μ

•

μ

μ

μ

Sp2 -

•

μ

•

μ

•

μ

μ

(Sp2)

_____ μ

- 300 - 600 μ .

1 μ 5-15' μ

- 25-50 μ .

- $\mu\mu$
1-3' μ 25 μ .
3-5' μ 50 μ .

- μ
1-2'' > 25
2-3'' > 50

(Sp2)

_____ μ

8 x 25 2'

6 x 50 5'

6 x 4 x 25 30'' (1 / 3)

4 x 25 (2') + 4 x 25 (2') + 200 μ .

(Sp2)

_____ μ

μ

3-4

μ

μ

μ

*

μ

(

μ

$\mu\mu$

)

,

(Sp2)

μ

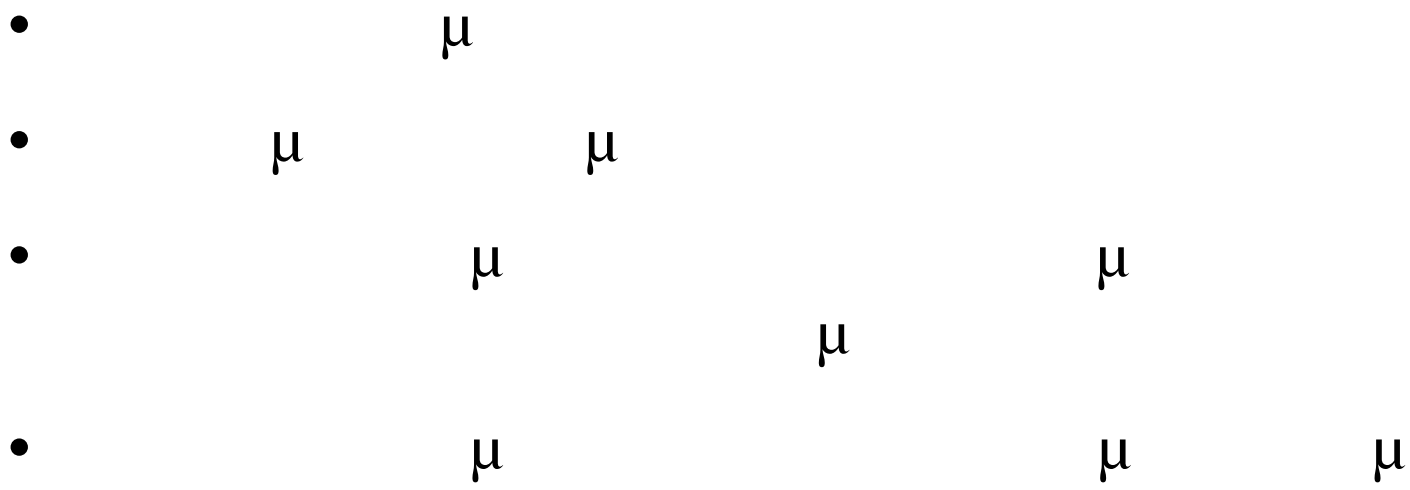
$$\begin{array}{r} \mu \\ \hline 8 \times 100 \quad 2' \\ \quad 25 \quad \quad - 75 \end{array}$$

$$\begin{array}{r} \mu \quad \quad \mu\mu \\ \hline 8 \times \\ 50 \quad \quad 1' \\ 100 \quad \quad 2' \end{array}$$

$$\begin{array}{r} \mu \\ \hline 8 \times \\ 25 \quad \quad \quad 1' \\ 125 \quad \quad \quad 2' \end{array}$$

(Sp3)

Sp3



(Sp3)

_____ μ

- 50 - 300 μ .
3-6 μ μ $\mu\mu$ 3-10'.
- $\mu\mu$
45'' - 2' μ
- 10-12½ μ . 5-8
- μ - 25 μ .
 μ / μ

(Sp3)

_____ μ

μ

2-3 μ

μ

μ

μ

*

μ

(μ

)

μ

(Sp3)

μ

10 x 50 2'
 6

μ

16 x 25 1'
 12.5

(Sp3)

μ

μ ()
6-8 μ - 3 μ

() 5-10''

6-10

1-3

$\mu\mu$ 1-2' μ

$\mu\mu$ 5-10' μ μ μ

/ μ

(μ μ μ)

(Sp3)

μ

μ (μ)

power rack / swim wheel

μ 12.5 μ .

4-10

1-3

$\mu\mu$ 1-3' μ

$\mu\mu$ 3-10' μ μ

(μ μ / μ μ)

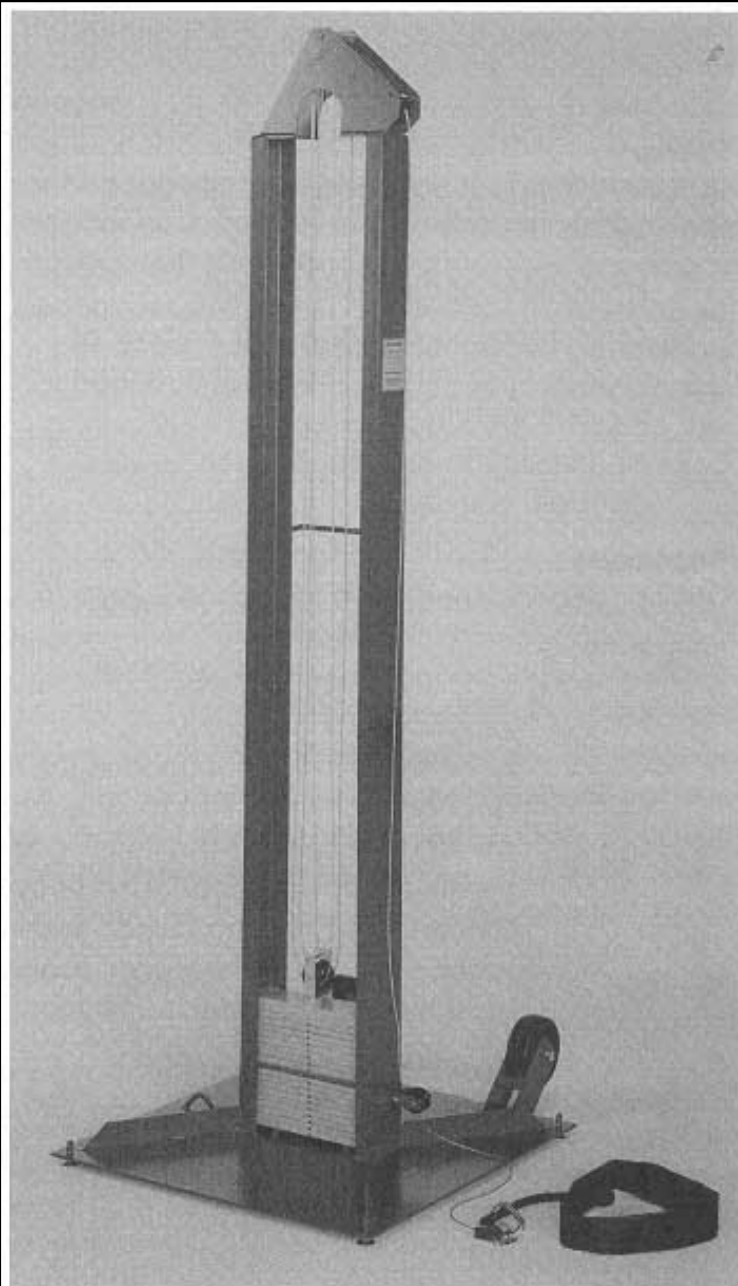


Figure 14.3 A photo of a Power Rack.

This device is marketed by Total Performance, Inc., P.O. Box 268, 592 South Illinois Avenue, Mansfield, Ohio.

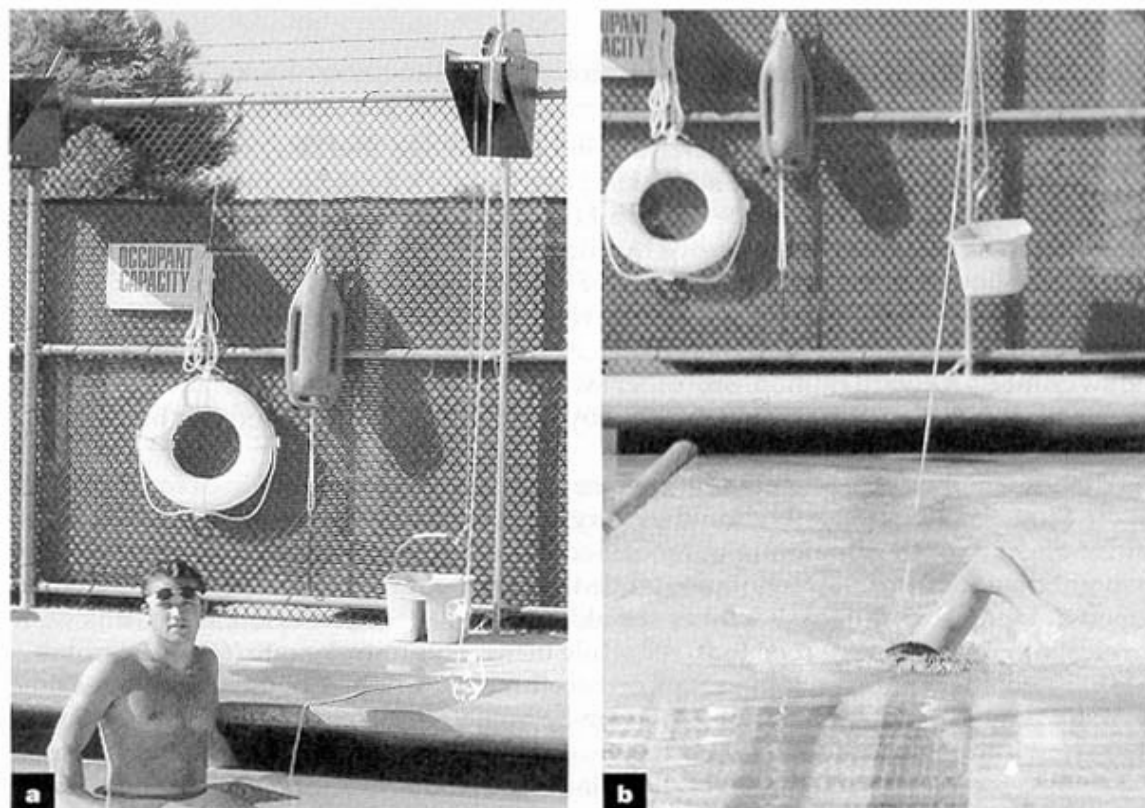


Figure 14.4 Photos of a swim wheel. Bob Mertz and Kennon Heard invented this device while they were students and competitive swimmers at California State University, Bakersfield. Photo (a) shows Derek Robinson preparing to swim down the pool. The wheel is mounted on the fence behind him with a bucket of diving bricks sitting on the deck. Photo (b) shows him swimming down the pool while lifting the bucket. The swim wheel can be built inexpensively according to the description given in this textbook.

(Sp3)

μ

μ ()

μ

2-3

μ

1-2

μ

25-50 μ .

4-10

6-8

$\mu\mu$ -

2-3'

/

μ

(R-P)

μ

R-P -

•

μ

μ

μ

μ

•

μ

•

μ

μ

μ

μ

μ

•

μ

μ

μ

μ

(R-P)

R-P -

•

μ

•

μ

•

μ

μ (R-P)

_____ μ

•
100 - 1500 μ .

• $\mu\mu$
 μ $\mu\mu$ μ

10-30'' μ μ μ μ μ μ
1' μ μ 100 μ .

•
1/2 - 1/4 μ 200 μ .
1/4 - 1/16 μ

•
 μ

(R-P)

μ

μ 50 μ .

1-3 x 6-8 x 12½ μ . μ 20-30'' 2-3

1-3 x 4-8 x 25 μ . μ 30-60'' 2-3'

μ 100 μ .

1-4 x 6-12 x 25 μ . μ 15-30'' 3-5'

6-16 x 50 μ . 30-45''

μ 200 μ .

3-5 x 12-20 x 25 μ 5-10'' 3-5'

2-4 x 8-10 x 25 μ 20-30'' 3-5'

8-12 x 100 μ 45-90''

μ (R-P)

μ 400 μ .

20-30 x 50 μ . μ 10-20''

10-15 x 100 μ . μ 30-45''

4-8 x 200 μ . μ 1-3'

μ 1500 μ .

30-60 x 50 μ . μ 10''

15-30 x 100 μ . μ 10-20''

10-15 x 200 μ . μ 30-60''

2-3 x 400 μ . μ 2-5'

μ

(R-P)

_____ μ

,

μ

4-6

μ

μ

1-2

μ

-

*

μ

, μ

$\mu\mu$

μ

μ

(R-P)



μ

μ

μ

.

,

μ

μμ μ

.

200μ.

- 4 x50μ.

2:00

50μ. 30'' -

μμ 10''

μ

μ

(R-P)

μ

50 - 2 x 25 μ μμ 5-10''

100 - 4 x 25 μ 5-10''

100 - 2 x 50 μ 10-30''

200 - 4 x 50 μ 5-10''

200 - 8 x 25 μ 5''

200 - 2 x 100 μ 10-30''

400 - 4 x 100 μ 10-20''

400 - 8 x 50 μ 5-10''

400 - 200/100/100 μ 20-30''

400 - 100/200/100 μ 20-30''

1500 - 15 x 100 μ 10-20''

1500 - 30 x 50 μ 5-10''

(Rec)

Rec

•

μ

•

μ

•

,

μ

, μ

,

μ

•

μ

μ

μ

μ

(Rec)

_____ μ

•

10-20'

μ

μ

μ

•

μ

μ

μ

•

$\mu\mu$

μ

$\mu\mu$

μ

•

90-120

μ

μ

μ

7-12/20

(Rec)

_____ μ

μ

μ

(μ

μ

μ

μ

μ

)

1-3 μ

μ

μ

1

En1, En2, En3

Sp1, Sp2, Sp3

RP

Rec

μ

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