1

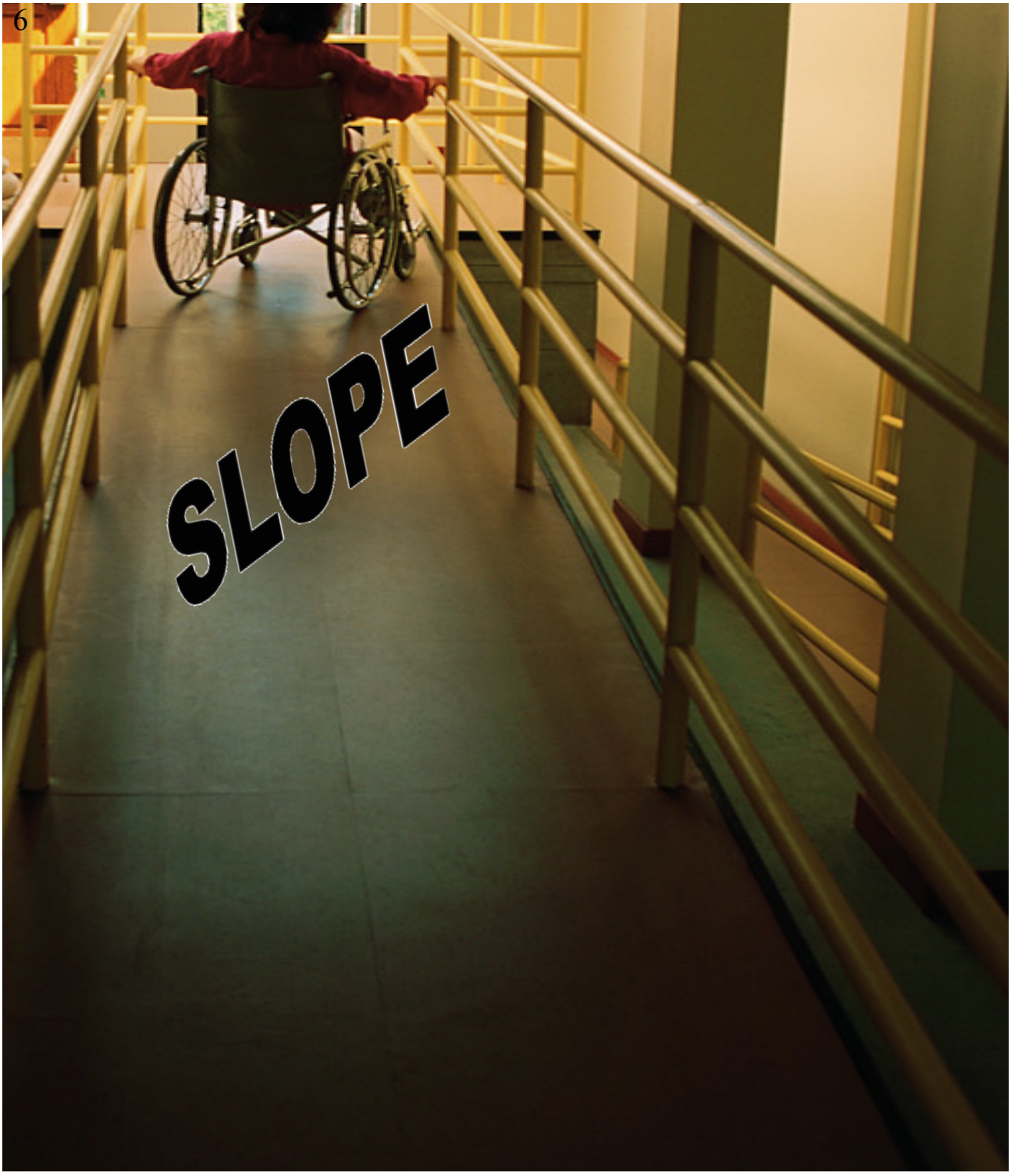
2


3
SLOPE

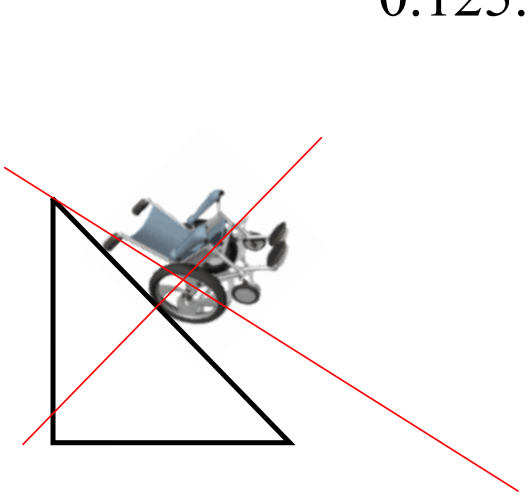
4

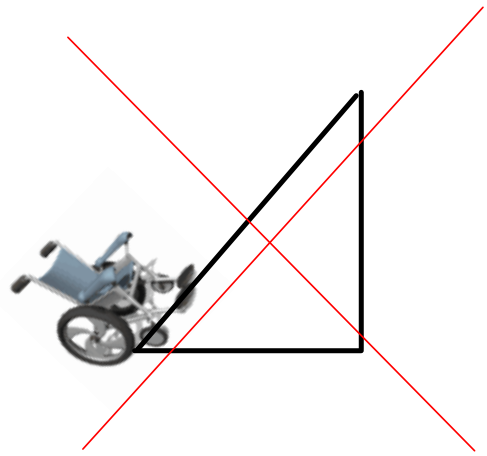
5

6



A wheelchair ramp should not exceed a slope of 0.125.





8

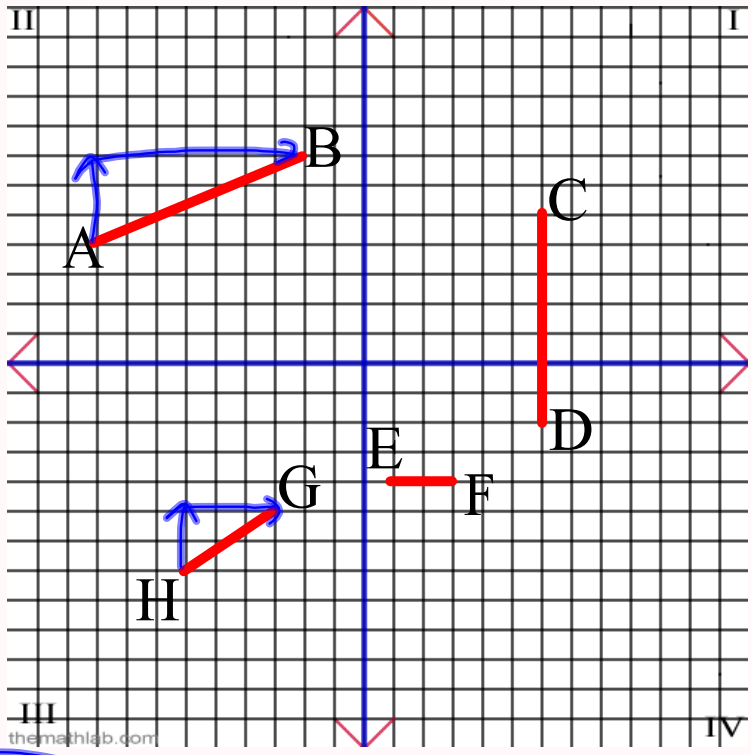
Building stairs
should
not exceed
a slope of
0.83

Types of Slope

Calculating slope!

$$\text{slope} = \frac{\text{rise}}{\text{run}}$$

11



slope = $\frac{\text{rise}}{\text{run}}$

This is used when you can see the graph!

$\overline{AB}\ \frac{3}{7}$ $\overline{HG}\ \frac{2}{3}$ $\overline{EF} = \frac{0}{2} = 0$ $\overline{CD} = \frac{7}{0}$ = Undefined

Slope of a Horizontal Line = 0

= 0 or 0/1

Slope of a Vertical Line = Undefined or 1/0

= 1/0 or Undefined

Calculating slope!

$$slope = \frac{y_2 - y_1}{x_2 - x_1}$$

Calculating slope!

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

Find the slope of a line passing through the points (2,-3) and (-5,8).

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

This is used when you are given co-ordinates.

(x, y)

1st 2nd

$(2, -3)$ $(-5, 8)$

$m = \frac{y_2 - y_1}{x_2 - x_1}$

$m = \frac{8 - -3}{-5 - 2}$

$m = \frac{11}{-7}$ $\frac{-11}{7}$

1st 2nd

$(-5, 8)$ $(2, -3)$

$m = \frac{y_2 - y_1}{x_2 - x_1}$

$m = \frac{-3 - 8}{2 - -5}$

$m = \frac{-11}{7}$

Find the slope of a line passing through the points (-5, -7) and (-3,9).

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$(-5, -7)$ $(-3, 9)$

$m = \frac{y_2 - y_1}{x_2 - x_1}$

$m = \frac{9 + 7}{-3 + 5}$ $\quad m = 8$

$m = \frac{16}{2}$

Find the slope of a line passing through the points (6, -4) and (-2,10).

$$m = \frac{y_2 - y_1}{x_2 - x_1}$$

$(x_1, y_1) \quad (x_2, y_2)$

$(6, -4) \quad (-2, 10)$

$m = \frac{y_2 - y_1}{x_2 - x_1}$

$m = \frac{10 - -4}{-2 - 6}$

$m = \frac{14}{-8}$

$m = -\frac{7}{4}$