## FPC 10

## 5.1 - Slope of a Line Segment

The $\qquad$ of a roof can be measured by finding its $\qquad$ .

Numerical Value of Slope $=$ $\qquad$ $=$ $\qquad$ $=$


Roof A


Roof B

Determine the SLOPE of each of the roofs shown above.

Which roof is STEEPER? Why?

1. Determine the slope of each line segment given below.
a)

ii) Using the coordinates of the points $E$ and $F$
b)

2. Draw a line segment with the given slope.
a) $\frac{4}{9}$
b) $\frac{8}{-3}$
c) -3



3. Determine the slope of the line that passes through the points: $E(4,-5)$ and $F(8,6)$.
4. Determine the slopes of the line segments given below.


5. Tom has a part-time job. He recorded the hours he worked and his pay for 3 different days. Tom plotted this data on a grid.
a) Draw a line through these points and find its slope?
b What does the slope represent?
c) How can the answer to part $b$ be used to determine:

## Graph of Tom's Pay


i) How much Tom earned in $3 \frac{1}{2}$ hours?
ii) The time it took Tom to earn $\$ 30$ ?
6. A wheelchair ramp has a slope of $\frac{2}{3}$. If the height of the ramp is 5 ft , what must be the horizontal length of the ramp?
7. A line with has a slope of -2 . The line passes through the points $P(-2,6)$ and $Q(1, m)$. Determine the value of $m$.

## Real World Meaning of Slope

For each of the following, determine the meaning of the slope value: Slope = $\qquad$







