

UNIT 5 *Linear Graphs and Equations*

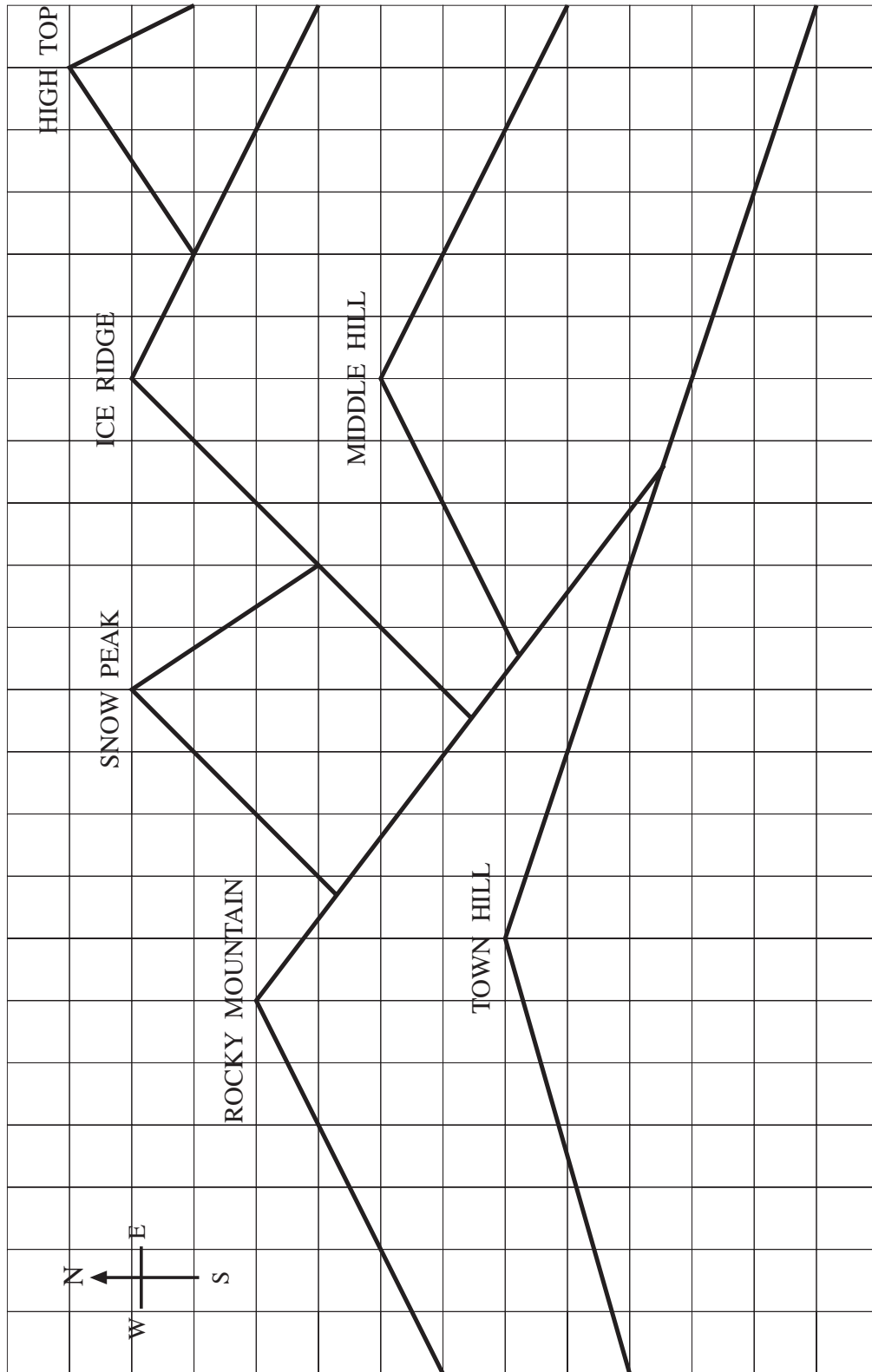
Activities

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- 5.1 Mountain Tops
 - 5.2 Equations for Patterns
 - 5.3 Equations for Logos
- Notes and Solutions (2 pages)

ACTIVITY 5.1

Mountain Tops



A mathematician takes a photograph of some mountains while on holiday. He traces the outlines of the west-facing and east-facing slopes of the mountains onto squared paper, as shown.

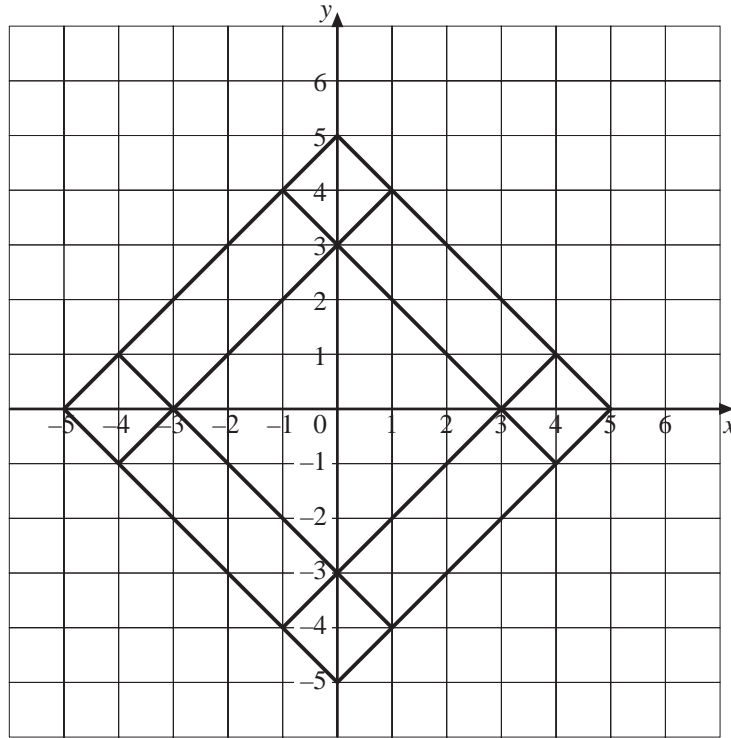
1. Calculate the gradient of each slope for each hill or mountain.
2. Which would be the most difficult slope to climb?

ACTIVITY 5.2

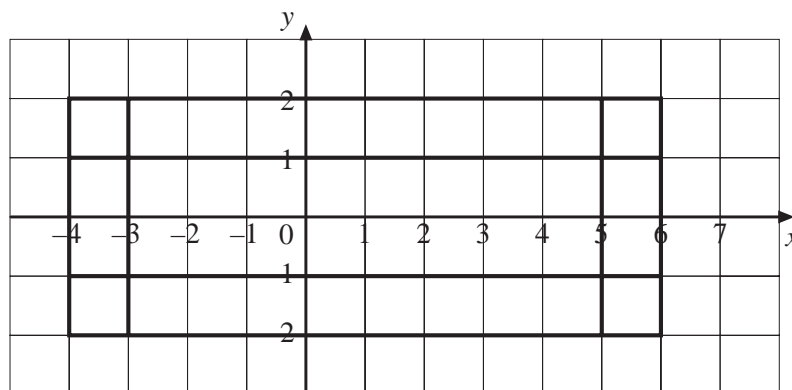
Equations for Patterns

Each of the following patterns has been drawn using straight lines.

1. What are the equations of the lines in this pattern?



2. What are the equations of the lines that form this pattern?

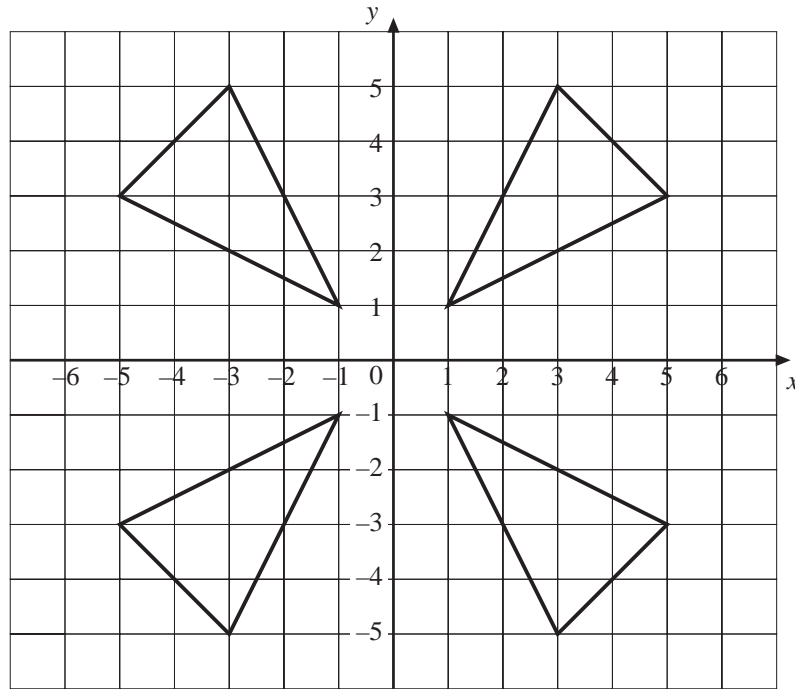


ACTIVITY 5.3

Equations for Logos

Write down the equations of the lines in the following patterns, which are designs for logos:

(a)



(b)

