ACTIVITIES 5.1 - 5.2 *Notes and Solutions*

Notes and solutions given only where appropriate.

5.1 1.

Mountain/Hill	Gradient of West-Facing Slope	Gradient of East-Facing Slope
Rocky Mountain	$\dfrac{1}{2}$	$-\dfrac{3}{4}$
Town Hill	$\dfrac{2}{7}$	$-\dfrac{1}{3}$
Snow Peak	1	$-\dfrac{3}{2}$
Middle Hill	$\dfrac{1}{2}$	$-\dfrac{1}{2}$
Ice Ridge	1	$-\dfrac{1}{2}$
High Top	$\dfrac{2}{3}$	-2

2. It would be most difficult to climb the east-facing slope of High Top (steepest gradient).

5.2 1.

$y = -5 + x$	$y = x + 3$
$y = -x + 3$	$y = x + 5$
$y = -x - 3$	$y = x - 3$
$y = -x - 5$	$y = x - 5$

2.

$x = -4$	$y = 2$
$x = -3$	$y = 1$
$x = 5$	$y = -1$
$x = 6$	$y = -2$

ACTIVITY 5.3

Notes and Solutions

5.3 (a) $y = 2x - 1$

$y = \dfrac{1}{2}x + \dfrac{1}{2}$

$y = -x + 8$

$y = \dfrac{1}{2}x - \dfrac{1}{2}$

$y = 2x + 1$

$y = -x - 8$

$y = -\dfrac{1}{2}x - \dfrac{1}{2}$

$y = -2x + 1$

$y = x - 8$

$y = -\dfrac{1}{2}x + \dfrac{1}{2}$

$y = -2x - 1$

$y = x + 8$

(b) $y = -x + 5$

$y = x - 5$

$x = 1$

$y = 2$

$y = -2$

$y = x + 2$

$y = -4$

$y = x + 4$

$y = -x - 4$

$y = 4$

$y = -x - 2$