

# Contents

<b>Introduction</b>	<b>5</b>
<b>1 A General Linear Function</b>	<b>7</b>
1.1 Linear function . . . . .	7
1.2 General linear function . . . . .	8
1.3 Homogeneity field of Jensen's function . . . . .	16
1.4 Remarks on a general linear function . . . . .	31
1.5 General construction of additive functions . . . . .	38
<b>2 Polynomial Functions</b>	<b>45</b>
2.1 Polynomial . . . . .	45
2.2 Polynomial function . . . . .	49
<b>3 A Cosine Function</b>	<b>59</b>
3.1 Solution of cosine equation . . . . .	60
3.2 General cosine function . . . . .	63
3.3 Some physical interpretations . . . . .	69
<b>Bibliography</b>	<b>75</b>
<b>Index</b>	<b>79</b>

$$f(x+y) = f(x) + f(y) \quad (0.1)$$