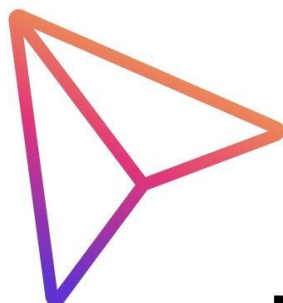


# 升中一銜接課程

數學科(中英對照筆記)



**飛揚升中數學**

## 1 有向數及數線

## Directed Numbers and the Number Line

- 1 (a) 若  $+6^{\circ}\text{C}$  表示氣溫上升  $6^{\circ}\text{C}$ ，則 \_\_\_\_\_ 表示氣溫下降了  $6^{\circ}\text{C}$ 。  
 (b) 若  $-3\text{ kg}$  表示減肥  $3\text{ kg}$ ，則 \_\_\_\_\_ 表示增肥  $3\text{ kg}$ 。

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- (a) If  $+6^{\circ}\text{C}$  means the temperature rises by  $6^{\circ}\text{C}$ , then \_\_\_\_\_ means the temperature drops by  $6^{\circ}\text{C}$ .  
 (b) If  $-3\text{ kg}$  means the weight decreases by  $3\text{ kg}$ , then \_\_\_\_\_ means the weight increases by  $3\text{ kg}$ .

- 2 (a) 若  $+7\text{ km}$  表示向南走  $7\text{ km}$ ，則  $-7\text{ km}$  表示 \_\_\_\_\_。  
 (b) 若  $-\$2\,000$  表示貶值  $\$2\,000$ ，則  $+\$2\,000$  表示 \_\_\_\_\_。

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- 2 (a) If  $+7\text{ km}$  means walking  $7\text{ km}$  to the south, then  $-7\text{ km}$  means \_\_\_\_\_.  
 (b) If  $-\$2\,000$  means the value depreciates by  $\$2\,000$ , then  $+\$2\,000$  means \_\_\_\_\_.

- 3 在每對數之間填上正確的符號 “ $<$ ” 或 “ $>$ ”。

- (a)  $-5$  \_\_\_\_\_  $+8$   
 (b)  $+7$  \_\_\_\_\_  $0$   
 (c)  $-6$  \_\_\_\_\_  $-1$   
 (d)  $-9$  \_\_\_\_\_  $0$

- 3 In each of the following, fill “ $<$ ” or “ $>$ ” in the space provided.

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- (a)  $-5$  \_\_\_\_\_  $+8$   
 (b)  $+7$  \_\_\_\_\_  $0$   
 (c)  $-6$  \_\_\_\_\_  $-1$   
 (d)  $-9$  \_\_\_\_\_  $0$

- 4 (a) 畫一數線，並在線上加點，以表示 +3、-3、0 及 +2。  
 (b) 把 (a) 中的數字由小至大寫出。

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- (a) Draw a number line. Use dots to represent the numbers +3, -3, 0 and +2 on the line.  
 (b) Arrange the numbers in (a) in ascending order of magnitude.
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5 計算下列各式。

- (a)  $(-18) + (+5) - (+7)$   
 (b)  $(+6) - (-3) + (-4)$

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Calculate each of the following.

- (a)  $(-18) + (+5) - (+7)$   
 (b)  $(+6) - (-3) + (-4)$
- 

6 計算下列各式。

- (a)  $(-5) \times (+4) \div (-2)$   
 (b)  $(+8) \div (-2) \times (-3)$

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Calculate each of the following.

- (a)  $(-5) \times (+4) \div (-2)$   
 (b)  $(+8) \div (-2) \times (-3)$
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7 計算下列各式。

- (a)  $(-4)^2 \div (-2) \times (-5)$   
 (b)  $(-12) \times (+7) - (-36) \div (-6)$

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Calculate each of the following.

- (a)  $(-4)^2 \div (-2) \times (-5)$   
 (b)  $(-12) \times (+7) - (-36) \div (-6)$
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- 8 在冬季的某天，紐約早上的氣溫是  $-3^{\circ}\text{C}$ ，下午氣溫上升了  $8^{\circ}\text{C}$ ，而晚上下降了  $10^{\circ}\text{C}$ 。求晚上的氣溫。

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One morning in New York, the temperature was  $-3^{\circ}\text{C}$ . It rose by  $8^{\circ}\text{C}$  in the afternoon and dropped by  $10^{\circ}\text{C}$  at dusk. Find the temperature at dusk.

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(請同學在 飛揚答題紙 上作答)

**2 Introduction to Algebra**

## 代數簡介

**1**

試用代數式表示下列各語句。

- (a) 17 減  $x$ 。
- (b)  $y$  乘以 9，並把所得的積加 5。
- (c) 13 加  $h$ ，並把所得的和除以 12。
- (d) 18 除以  $k$ ，並把所得的商減 4。

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Represent each of the following word phrases by an algebraic expression.

- (a) Subtract  $x$  from 17.
- (b) Multiply  $y$  by 9 and then add 5 to the product.
- (c) Add  $h$  to 13 and then divide the sum by 12.
- (d) Divide 18 by  $k$  and then subtract 4 from the quotient.

**2**

用文字描述下列各代數式。

- (a)  $8 + m$
- (b)  $n^2 \times 23$
- (c)  $r \div 2 - 4$
- (d)  $(s + 6) \div 11$

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Use word phrases to describe the following algebraic expressions.

- (a)  $8 + m$
  - (b)  $n^2 \times 23$
  - (c)  $r \div 2 - 4$
  - (d)  $(s + 6) \div 11$
-

3

試用代數式表示下列各語句。

- 一個數減 12，然後把所得的差除以該數。
- 一個數與 3 的積減 6，然後把所得的差乘以 8。
- 一個數的立方加 15。

Represent each of the following word phrases by an algebraic expression.

- Subtract 12 from an unknown number and then divide the difference by that number.
- Subtract 6 from the product of 3 and an unknown number, and then multiply the difference by 8.
- Add 15 to the cube of an unknown number.

4

文玲買了 5 包餅乾，每包有  $b$  塊餅乾。小玲有多少塊餅乾？

Rainie buys 5 packets of biscuits. If each packet contains  $b$  biscuits, how many biscuits does Rainie have?

5

某店在星期四售出  $x$  件恤衫。星期五所售出的恤衫數目是星期四的 3 倍。星期六所售出的恤衫數目比星期五的少 16 件。求星期六所售出的恤衫數目。

A shop sold  $x$  shirts on Thursday. The number of shirts sold on Friday was 3 times that sold on Thursday. The number of shirts sold on Saturday was 16 less than that sold on Friday. Find the number of shirts sold on Saturday.

6

慧妮買了 5 部計算機，每部的售價是  $\$x$ 。試以代數式表示以下各題的答案。

- 求慧妮購買計算機須付的金額。
- 若慧妮原有  $\$y$ ，求她購買計算機後尚餘的金額。

Ellen buys 5 calculators for  $\$x$  each. Use an algebraic expression to represent the answer of each of the following.

- Find the amount that Ellen should pay to buy the calculators.
- If Ellen has  $\$y$  originally, find the amount left after buying the calculators.

(請同學在飛揚答題紙上作答)