A school has a sponsored swim in summer and a sponsored walk in winter. 1 In 2010, the school raised a total of \$1380.

The ratio of the money raised in

summer: winter = 62:53.

Examiner's Use

(a) (i) Show clearly that \$744 was raised by the swim in summer.

Answer (a)(i)

$$\frac{62}{62 + 53} \times $1380 = \frac{62}{115} \times $1380$$

$$= $744$$

[1]

(ii) Alesha's swim raised \$54.10. Write this as a percentage of \$744.

Alesha's swim raised \$54.10. Write this as a percentage of \$744.
$$\frac{$54.10}{$744} \times 100\% = 7.271505376...\%$$

$$\approx 7.27\%$$
Answer(a)(ii) 7.27

%[1]

(iii) Bryan's swim raised \$31.50.

He received 75 cents for each length of the pool which he swam. = \$0.75

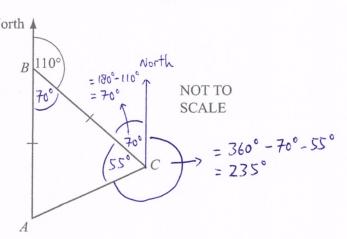
Calculate the number of lengths Bryan swam.

$$\frac{$31.50}{$0.75} = 42$$

Answer(a)(iii) [2]

(b) The route for the sponsored walk in winter is triangular.

LABC = 180°-110° $= 70^{\circ}$ $\angle ACB = \frac{180^{\circ} - 70^{\circ}}{2}$



(i) Senior students start at A, walk North to B, then walk on a bearing 110° to C. They then return to A. AB = BC.

Calculate the bearing of A from C.

Answer(b)(i) 235° [3]