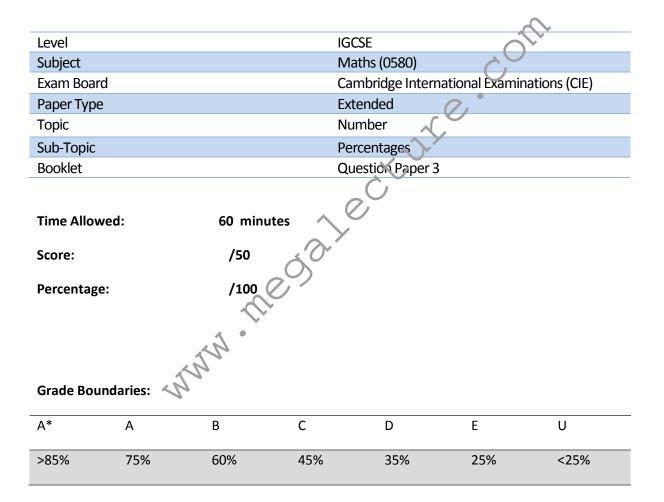


Percentages

Question Paper 3



- 1 A tennis club has 560 members.
 - (a) The ratio men : women : children = 5:6:3.
 - (i) Show that the club has 240 women members.

Answer(a)(i)

(ii) How many members are children?

(b) $\frac{5}{8}$ of the 240 women members play in a tournament.

How many women members do not play in the tournament?

- (c) The annual membership fee in 2013 is \$198 for each adult and \$75 for each child.
 - (i) Calculate the total amount the 560 members pay in 2013.

Answer(*c*)(i) \$ [2]

(ii) The adult fee of \$198 in 2013 is 5.6% more than the fee in 2012.

Calculate the adult fee in 2012.

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[2]

(d) The club buys 36 tennis balls for \$9.50 and sells them to members for \$0.75 each.Calculate the percentage profit the club makes.

<i>Answer</i> (<i>d</i>)%	[3]
(e) A tennis court is a rectangle with length 23.7 m and width 10.9 m, each correct to 1 decimal place. Calculate the upper and lower bounds of the perimeter of the court.	ce.
2ecture.	
Answer(e) Upper bound m	
Lower bound m	[3]
The Tiger Sky Tower in Singapore has a viewing cansule which holds 72 people	

2 The Tiger Sky Tower in Singapore has a viewing capsule which holds 72 people. This number is 75% of the population of Singapore when it was founded in 1819. What was the population of Singapore in 1819?

Answer [2]

3 Maria pays \$84 rent. The rent is increased by 5%.

Calculate Maria's new rent.

Answer \$ [2]

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- 4 (a) The Martinez family travels by car to Seatown. The distance is 92 km and the journey takes 1 hour 25 minutes.
 - The family leaves home at 07 50. (i) Write down the time they arrive at Seatown.

Answer(a)(i) [1]

(ii) Calculate the average speed for the journey.

Answer(a)(ii) km/h [2] (iii) During the journey, the family stops for 10 minutes. Calculate 10 minutes as a percentage of 1 hour 25 minutes. in the sale is Answer(a)(iii) % [1]

(iv) 92 km is 15% more than the distance from Seatown to Deecity.

Calculate the distance from Seatown to Deecity.

Answer(a)(iv) km [3]

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(b) The Martinez family spends \$150 in the ratio

fuel: meals: gifts = 11:16:3.

(i) Show that \$15 is spent on gifts.

Answer (b)(i)

[2]

(ii) The family buys two gifts. The first gift costs \$8.25.

Find the ratio

cost of first gift : cost of second gift.

Give your answer in its simplest form.

Answer(b)(ii) : [2]

- 5 The taxi fare in a city is \$3 and then \$0.40 for every kilometre travelled.
 - (a) A taxi fare is \$9.

How far has the taxi travelled?

Answer(a) km [2]

(b) Taxi fares cost 30% more at night.

How much does a \$9 daytime journey cost at night?

6 (a In a sale, Jen buys a laptop for \$351.55. This price is 21% less than the price before the sale.

Calculate the price before the sale.

(b) Alex invests \$4000 at a rate of 8% per year simple interest for 2 years. Bob invests \$4000 at a rate of 7.5% per year compound interest for 2 years. Who receives more interest and by how much?

Answer(b) _____ receives \$ _____ more interest. [6]

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7 Maria decides to increase her homework time of 8 hours per week by 15%.

Calculate her new homework time. Give your answer in hours and minutes.

Answer h min [3]

8 During a marathon race an athlete loses 2% of his mass. At the end of the race his mass is 67.13 kg.

Calculate his mass before the race.

Answer kg [3]

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