Homework sheet

Name Class Date

**Calculating Percentages and Averages**

JM Construction is a small business that completes a range of building work for clients. During the warmer months of the year, much of its work focuses on gardens, paths, patios, driveways and swimming pools. During the cooler months it focuses more on jobs indoors. **Table 1** shows the business’s costs and revenue for the last 5 years.

**Table 1**

|  |  |  |
| --- | --- | --- |
| Year | Revenue (US$) | Total costs (US$) |
| 2018 | 28,508 | 25,809 |
| 2019 | 39,737 | 32,692 |
| 2020 | 42,839 | 35,012 |
| 2021 | 18,441 | 29,367 |
| 2022 | 32,062 | 31,841 |

**1** Calculate JM Construction’s profit in:

**a** 2018

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**b** 2021

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**c** 2022

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**2** Calculate, to 2 decimal places, the percentage change in revenue between:

**a** 2018 and 2019

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**b** 2019 and 2022

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**3** Calculate the average revenue earned per worker in 2022 if the company had 82 staff

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**4** Calculate, to 2 decimal places, the percentage change in profit between:

**a** 2018 and 2021

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**b** 2019 and 2022

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**c** 2018 and 2022

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**Table 2** contains an extract from the comprehensive statement of income for Speed Sports for 2022.

**Table 2**

|  |  |
| --- | --- |
|  | AUD |
| Revenue | 470,000 |
| Direct materials | 255,000 |
| Direct labour | 6,500 |
| Total cost of sales |  |
| Gross profit |  |

Use the following formula to calculate the answers to Questions 5‒10:

* Gross profit = Revenue – Cost of sales
* Cost of sales = Direct labour + Direct materials
* Gross profit margin = Gross profit / Revenue × 100

**5** Cost of sales

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**6** Gross profit

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**7** Gross profit margin to two decimal places

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**8** Cost of sales as a percentage of revenue to two decimal places

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**9** Direct materials as a percentage of revenue to two decimal places

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**10** Average revenue between 2021 and 2022 if revenues in 2021 were AUD 424,000

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