| Student name | Date |
| :--- | :--- |

### 4.08 Percentage increases and decreases

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x - + +
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1 Over a year, the weight of a 10-year old increases from 30 kg to 36 kg . Calculate the increase as a percentage.

2 A furniture retailer cuts the price a shop-soiled lounge suite from $\$ 3750$ to $\$ 3075$. Calculate the percentage decrease in price.

3 An airline offers a 7.5\% discount on holiday packages. Calculate the price people will pay.
a Gold Coast (7 nights), original price $=\$ 1535.00$
b A weekend in Fiji, original price $=\$ 660$

4 One of the benefits for employees at Pricerite supermarket is an $18.5 \%$ discount on purchases. How much would an employee pay for a shopping basket that normally costs $\$ 361.70$ ?

5 A firm of lawyers decide to move from an office with a floor area of $700 \mathrm{~m}^{2}$ to one with a floor area of $1150 \mathrm{~m}^{2}$. By what percentage has the floor area increased?

6 A bus driver receives an increase in salary - from $\$ 48200$ to $\$ 51$ 204. Calculate the percentage increase.

7 An amusement park puts up its prices from \$29 to $\$ 34.50$. Calculate the percentage price increase. Give your answer to the nearest whole number.

8 Liam is buying a car. He knows that no-one actually pays the full price showing on the windscreen! The car he decides to buy is advertised for $\$ 8600$. He ends up paying $\$ 7310$. What percentage discount has he been given?

9 A home appliance retailer will give an 8\% discount for cash, if asked. How much cash will a customer pay for a home theatre system set that normally sells for $\$ 3739$ ?

10 A liquidator holds a sale to clear stock from an office. A filing cabinet originally worth $\$ 290$ is advertised for sale at $\$ 101.50$. Calculate the percentage discount.

11 The capacity of Eden Park was increased from 17600 to 60000 to provide for more spectators in time for the Rugby World Cup. By what percentage did the capacity increase? Give your answer to the nearest whole number.

12 At the end of each day, a bakery cuts prices of bread loaves in order to sell them on the day of manufacture. A Cape Seed loaf labelled $\$ 6.19$ is sold for $\$ 3.40$. Calculate the percentage reduction in price that the bakery is using. Give your answer to the nearest whole number.

13 The table shows the volume of grapes harvested at two different vineyards over a two year period.

|  | Last year | This year |
| :--- | :--- | :--- |
| Windy Ridge | 77900 kg | 83300 kg |
| Sunny Bay | 42500 kg | 47600 kg |

Which vineyard had the higher percentage increase in grapes harvested over this period?

