

Team names: \_\_\_\_\_

### Application Exercise 1

*Which coupon is the best?*

<p>(A)</p> <p><b>\$20 off</b></p>	<p>(B)</p> <p><b>20% off</b></p>
<p>(C)</p> <p><b>Buy 1, Get 1 at 50%</b> (50% off lower priced item)</p>	<p>(D)</p> <p><b>25% off online</b> (\$10 shipping)</p>

**Minimum evidence:** If each coupon can only be used once, what is the cheapest possible total when buying these eight items?

 \$29	 \$39	 \$119	 \$1499
 \$69	 \$79	 \$99	 \$469

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## Application Exercise 2



Uber is a US online transportation network company that operates

worldwide. Customers can request car trips via a mobile app.

The drivers use their own cars and receive a part of the fare paid.

Uber compete with traditional taxi services (who employ their drivers and supply cars) by offering higher quality cars, quicker service and often cheaper fares.

In only 8 years Uber has become the largest private company (not on the stock exchange) with an estimated value of \$68 billion. It has received \$11.5 billion in funding from investors based on the promise of future profits. However, in 2016, Uber had \$5.5 billion of sales and \$8.5 billion of costs; a \$3 billion loss. As well as concern about their finances, the company faces protests and legal action.

Uber already operates in some Australian capital cities.

What if it came to Bendigo?

A trip from Crusoe in Kangaroo Flat to central Bendigo takes about 15 minutes to travel 7km. Bendigo Taxi companies charge \$18.38 for this trip. Taxi drivers are paid a salary equal to about \$20/hour.

Fuel costs about 15c/km. Companies pay for cars and registration.

*How should Uber price a fare from Kangaroo Flat to Bendigo?*

- (A) \$12
- (B) \$18
- (C) \$20
- (D) \$24

**Minimum evidence:** Calculate percentage profit of Uber and compare to the percentage profit of the taxi company.

$$\% \text{ profit} = \frac{\text{selling price} - \text{cost price}}{\text{cost price}} \times 100\%$$