

Q Reverse Percentages

- (c) In a sale, all prices are reduced by 24%.
Victor pays \$36.86 for a pair of shoes in the sale.

Calculate the original price of the shoes.

\$ [2]

- (iii) Last year, the mean mass of pears produced was 54 kg per tree.
This was a decrease of 10% on the mean mass of pears produced per tree from the year before.

Calculate the mean mass of pears produced by each pear tree the year before.

..... kg [2]

- (d) The cost of a railway magazine increases by 12.5% to \$2.70 .

Calculate the cost of the magazine before this increase.

\$ [2]

- 16** The selling price of a shirt is \$26.50 .
This includes a tax of 6%.

Calculate the price of the shirt before the tax was added.

\$ [2]

- 15** The cost of a train journey is increased by 6% to a new cost of \$153.70 .

Calculate the original cost of the train journey.

\$ [2]

- 12** Oliver sent 22% more messages in June than in May.
He sent 305 messages in June.

Find how many more messages he sent in June than in May.

..... [3]

- 10** When Jack sells a computer for \$264 he makes a profit of 20%.

Work out the price Jack paid for the computer.

\$ [2]

- 9** A shop has a sale and all prices are reduced by 20%.

- (a)** The original price of a shirt is \$16.

Find the sale price of the shirt.

\$ [2]

- (b)** The sale price of a dress is \$40.

Find the original price of the dress.

\$ [2]

- (c)** Arno buys a student ticket for \$43.68 .
This is a saving of 16% on the full price of a ticket.

Calculate the full price of a ticket.

\$ [2]

- (d) Arjun earned \$36 515 in 2019.
This was an increase of 9% on his earnings in 2018.

Work out his earnings in 2018.

\$ [2]

- (b) In September the total income at the campsite was \$37 054.
This was a decrease of 4.5% on the total income in August.

Calculate the total income in August.

\$ [2]

- (b) In 2019, a packet of pasta cost \$2.40.
This was an increase of 25% of the cost of a packet in 2018.

- (i) Work out the cost in 2018.

\$ [2]

- (d) In 2024, the company had total sales of \$52 million.
This was an increase of 30% on the total sales for 2023.

Work out the total sales in 2023.

\$ million [2]

- (d) In another week Dinari sells fruit and vegetables for \$1738.
He makes a profit of 10%.

Calculate the amount he paid for the fruit and vegetables in that week.

\$ [2]

- (ii) The fuel tank in the new car has a capacity of 45 litres.
This is 72% of the capacity of the fuel tank in her old car.

Calculate the capacity of the fuel tank in her old car.

..... litres [2]

- (iii) In 2023 there were 120 members.
This was a decrease by 4% of the number of members in 2022.

Calculate the number of members in 2022.

..... [2]

- (b) Chao collects \$47.50 for charity.

- (i) Bob collects 28% more than Chao.

Find the amount Bob collects.

\$ [2]

- (ii) Chao collects 60% less than Mei.

Find how much more money Mei collects than Chao.

\$ [3]

- 17 Adil and Brian are paid the same wage.
Adil is given a 7% pay decrease and his new wage is \$427.80 .
Brian is given a 7% pay increase.

Work out Brian's new wage.

\$ [3]