

13 Simplify.

$$\frac{7}{2m} + \frac{3}{8m}$$

..... [2]

14 (a) Carlos invests \$24 000 at a rate of 3.2% per year compound interest.

Calculate the value of his investment at the end of 4 years.

\$ [2]

(b) Carlos buys a painting for \$ x .
He sells the painting for \$40 870.
He makes a profit of 34%.

Calculate the value of his profit.

\$ [3]

(c) Carlos also buys a car with a value of \$32 500.
The value of the car decreases exponentially by 23% each year.

Find a formula for the value, \$ V , of the car at the end of n years.

..... [3]