

MATHEMATICS



Topic: Percentage increase and decrease.

- ❖ Percentage increase and decrease means that a number, such as a price, increases by a certain amount.
- ❖ Jabu's school fees have gone up from R5 000 per year in 2012 to R5 600 per year in 2013. Calculate the percentage increase.

The 1st step $R5\ 600 - R5\ 000 = R600$

$$\frac{600}{5000} \times \frac{100}{1} = \frac{600}{50} = 12\%$$

More Worked examples

1. What is the final amount when a R128 concert ticket is increased by 15%

$$15\% \text{ of } R128 = \frac{15}{100} \times \frac{128}{1}$$
$$= R19,20$$

$$R128 + R19,20 = R147,20$$

2. Tom buys a bicycle on sale for R4 500. If the original price of the bicycle was R6 000, What is the percentage decrease?

Decrease

$$= R6\ 000 - R4\ 500$$

$$= R1\ 500$$

Percentage decrease

$$= \frac{1500}{6000} \times \frac{100}{1} = 25\%$$

Exercises

Exercise 13.16

1.

1.1

1.2

1.3

1.4

2.

2.1

2.2

2.3

2.4

2.5

Exercise 13.17

1.

1.1

1.2

1.3

1.4

2.

2.1

2.2

2.3

2.4