

CALCULATIONS, CHECKING AND ROUNDING

Number

Key Concepts

A value of 5 to 9 rounds the number up.

A value of 0 to 4 keeps the number the same.

Estimation is a result of rounding to one significant figure.

Examples

Round 3.527 to:

a) 1 decimal place

$$3.5 \overset{\cdot}{\underset{\cdot}{2}}7 \rightarrow 3.5$$

b) 2 decimal places

$$3.52 \overset{\cdot}{\underset{\cdot}{7}} \rightarrow 3.53$$

c) 1 significant figure

$$3 \overset{\cdot}{\underset{\cdot}{5}}27 \rightarrow 4$$

Estimate the answer to the following calculation:

$$\frac{46.2 - 9.85}{\sqrt{16.3 + 5.42}}$$

$$\frac{50 - 10}{\sqrt{20 + 5}}$$

$$\frac{40}{5} = 8$$



32, 90, 91

Key Words

Integers
Operation
Negative
Significant figures
Estimate

A) Round the following numbers to the given degree of accuracy
1) 14.1732 (1 d.p.) 2) 0.0568 (2 d.p.) 3) 3418 (1 S.F)

B) Estimate:

1) $\sqrt{4.09 \times 8.96}$

2) $25.76 - \sqrt{4.09 \times 8.96}$

3) $\sqrt[3]{26.64} + \sqrt{80.7}$

4) $\frac{\sqrt{6.91 \times 9.23}}{3.95^2 + 2.02^3}$