Surds Worksheet

Surds are square roots.

Exercise A Simplify (B Grade)

1. √12 2. √75 3. √28 4. √160

Exercise B Simplify (A Grade)

1. √3 x √2 2. √24 ÷ √8 3, 2√18 x 3√2 4. 4√33 ÷ 2√3

Exercise C Expand (A\* Grade)

1. √3(2 - √3) 2. 3√2(4-2√2) 3. (1+√3)(3 - √3) 4. (1 + √3)2

Exercise D Rationalise (A\* Grade)

1. 1 2. 2 3. (2 - √3) 4. (2 - √5)  
 √3 3√5 √3 (√5 +1)

Exercise E Working with surds

Work out the missing lengths in the following triangles. Leave you answer in surd form

√22

√15

1. 2. 3.

√8

√3

√11

√10

4. Prove that the following triangle is right-angled.

√2 + √10

2 +√5

√3

Exam questions



     