

## National 5 Homework

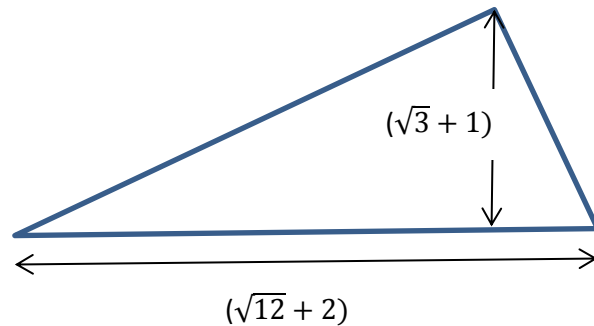
1. Express in simplest form with a rational denominator:

(a)  $\frac{2}{\sqrt{4}}$

(b)  $\frac{3\sqrt{5}}{\sqrt{8}}$

(c)  $\frac{4}{(\sqrt{3}+1)}$

2. Find the **exact** area of the triangle.



3. After a 4% pay rise Lisa earns £1456 per month.  
What did she earn before the pay rise?

4. Expand and simplify:

(a)  $3a(a + 5) - 2a(a - 7)$

(b)  $(b + 3)(2b - 4)$

(c)  $(2c + 4)(c^2 + 3c + 4)$

5. Fully factorise:

(a)  $12x^2 - 27$

(b)  $x^2 + 13x + 36$

(c)  $x^2 - 14x + 24$

(d)  $2x^2 - 5x - 12$