

National 5

Home Ex 6

- 1.  $f(x)=4-2x^2$ ,
  - a) Evaluate f(-3)
  - b) Given that f(a) = 2, find a
- 2. Solve 5 x > 2(x + 1)
- 3. Simplify  $\int m(2m + m^2)$
- 4. Find the equation of the line passing through (3, -2) and parallel to 2y 4x + 3 = 0.

5.

A triangular paving slab has measurements as shown. Is the slab in the shape of a right angled triangle? Show your working.



6. A new fraction is obtained by adding x to the numerator and denominator of the fraction 17/24. The new fraction is equivalent to 2/3. Find the value of x.

7. ST, a vertical pole 2 metres high, is situated at the corner of a rectangular garden, PQRS. RS is 8 metres long and QR is 12 metres long.
The pole casts a shadow over the garden.
The shadow reaches M, the midpoint of QR.
Calculate the size of the shaded angle TMS.

