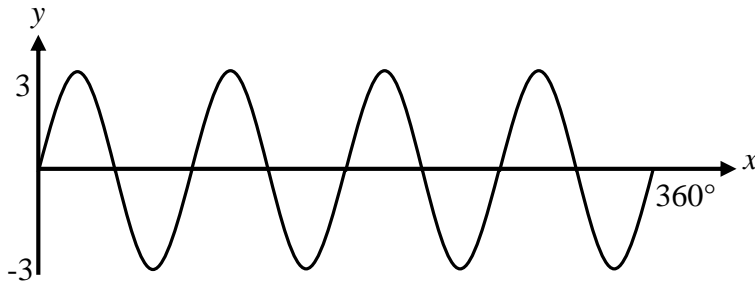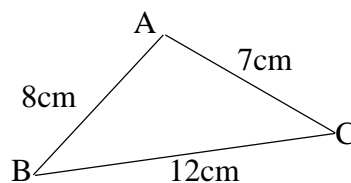1. The graph below has equation y = aSin$b$x. State the values of a and b.

2. The cost of 3 tennis rackets and one tube of 5 balls is £ 139.25

a) Write down an equation in a and b to represent this information.

b) The cost of 5 identical rackets and 3 tubes of 5 balls is £235.75.

   Write down a second equation in a and b to represent this information.

c) Find the cost of a racket and a tube of tennis balls.

3. Solve $3x^2 - 5x - 1 = 0$ correct to 1 decimal place.

4. A camera cost £317.90 after a 15% sale reduction. How much was the camera before the sale?

5. Find the size of angle BAC below.

6. Solve 3Tan$x$°+ 4 = 0 0 < x < 360.

7. Two points have coordinates A (4,7) and B (p,1). The gradient of the line AB is -3. Find the value of p.

8. A function has equation f(x) = (32)^x. Find the value of f($^3/_5$).

9. Express $\dfrac{8}{\sqrt{10}}$ with a rational denominator in its simplest form.

10. Fully simplify $\dfrac{x^2+4x-12}{x^2-4}$ $x \neq 2, -2$