

Exercise 2015-12EB-00005(1) – Quadratic formula

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

(1) Solve x : [If necessary, round off, correct to 2 decimals.]

(a) $x^2 - 3x + 3 = 0$

(b) $5 + 3x - x^2 = 0$

(c) $(2x - 1)(x + 3) = 1$

(d) $x^2 - 4x + 3 = 2x^2 + 5$

(2) Solve m : [If necessary, leave the answer in simplest surd form.]

$$\frac{3}{m^2 - 4} + \frac{2m}{m^2 + 2m} = \frac{1}{m}$$

(3) (a) Solve for k : $k + \frac{6}{k} = 5$

(b) Hence, or in any other way, solve x : $x^2 + x + \frac{6}{x^2 + x} - 5 = 0$

[If necessary, round off to 1 decimal.]