## **Solve Quadratics and Quadratic formula**

Name:	Class:	Date:		
		Mark	/ 10	%

1) Solve the following [7]

a) 
$$2a^2 + 3a + 1 = 0$$

b) 
$$2y^2 + 5y - 25 = 0$$

c) 
$$2y^2 - 11y + 5 = 0$$

d) 
$$2a^2 - a - 1 = 0$$

e) 
$$5b^2 + 7b - 6 = 0$$

$$f) 3x^2 - 16x + 16 = 0$$

g) 
$$9c^2 - 16 = 0$$

2) Solve the following, leaving your answers to 3 significant figures. [3]

a) 
$$3c^2 + 4c - 2 = 0$$

b) 
$$4a^2 - 10a - 8 = 0$$

c) 
$$11b^2 + 4b - 8 = 0$$

## Solutions for the assessment Solve Quadratics and Quadratic formula

**1**) a) 
$$a = -\frac{1}{2}$$
 or  $a = -1$ 

b) 
$$y = \frac{5}{2}$$
 or  $y = -5$ 

c) 
$$y = \frac{1}{2}$$
 or  $y = 5$ 

d) 
$$a = -\frac{1}{2}$$
 or  $a = 1$ 

e) 
$$b = \frac{3}{5}$$
 or  $b = -2$ 

f) 
$$x = \frac{4}{3}$$
 or  $x = 4$ 

g) 
$$c = -\frac{4}{3}$$
 or  $c = \frac{4}{3}$ 

b) 
$$a = 3.14$$
 or  $a = -0.637$ 

**2**) a) 
$$c = 0.387$$
 or  $c = -1.72$ 

c) 
$$b = 0.690$$
 or  $b = -1.05$