

Try This 3 Possible Solutions

The method of inspection is appropriate for these questions as the a and c values do not have a lot of factors. (a is the number in front the squared term and c is the constant term)

1. $2m^2 + 3m - 9 = (2m-3)(m+3)$

Verify:

$$(2m-3)(m+3)$$

$$= 2m^2 + 6m - 3m - 9$$

$$2m^2 + 3m - 9$$

Correct

2. $12y^2 + y - 1 = (4y-1)(3y+1)$

Verify:

$$(4y-1)(3y+1)$$

$$= 12y^2 + 4y - 3y - 1$$

$$= 12y^2 + y - 1$$

Correct

3. $2x^2 - x - 1 = (2x+1)(x-1)$

Verify:

$$(2x+1)(x-1)$$

$$= 2x^2 - 2x + 1x - 1$$

$$= 2x^2 - x - 1$$

Correct

4. $3x^2 + x - 2 = (3x-2)(x+1)$

Verify:

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

$$= 3x^2 + 3x - 2x - 2$$

$$= 3x^2 + x - 2$$

Correct