

**1 (a)** Factorise  $5x^2 + 6x - 8$

**[2 marks]**

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Answer \_\_\_\_\_

2 Circle the factor of  $x^2 - 5x$

[1 mark]

$x - 1$

$-5x$

$x - 5$

$5x$

- 3** Factorise  $x^2 - 64$   
Circle your answer.

**[1 mark]**

$$(x + 8)^2$$

$$(x - 8)^2$$

$$(x + 8)(x - 8)$$

$$x(x - 64)$$

**4**Factorise  $3x^2 - 16x - 12$ **[2 marks]**

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Answer 

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**5 (a)** By factorising  $x^2 + x - 90$  work out the value of  $x$ .

You **must** show your working

**[2 marks]**

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$x =$  \_\_\_\_\_

**6**

Factorise fully

$x^3 - 49x$

**[2 marks]**

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Answer 

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**7 (a)** Factorise  $8x^2 - 18x - 35$

**[2 marks]**

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Answer \_\_\_\_\_

**8**  $(x - 9) = \frac{2(6 - x^2)}{x + 3}$  and  $x = \frac{d \pm \sqrt{e}}{f}$

Work out one set of possible values for  $d$ ,  $e$  and  $f$ .

**[4 marks]**

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$d =$  \_\_\_\_\_

$e =$  \_\_\_\_\_

$f =$  \_\_\_\_\_