**1.** (a) You are given that 2*x*3 = 250  
Find the value of *x*.

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Answer *x* = ............................................

(1)

(b) Write 75 as the product of its prime factors.

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Answer ............................................

(2)

(Total 3 marks)

**2.** Write down all the common factors of 10 and 15.

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Answer ……………………………………………

(Total 2 marks)

**3.** (a) Write 18 as the product of its prime factors.

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Answer ………………………………

(2)

(b) What is the least common multiple (LCM) of 12 and 18?

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Answer ……………………………….

(1)

(Total 3 marks)

**4.** 36 expressed as a product of its prime factors is 22 × 32

(a) Express 45 as a product of its prime factors.  
Write your answer in index form.

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Answer ..................................................

(3)

(b) What is the Highest Common Factor (HCF) of 36 and 45?

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Answer ................................................

(1)

(c) What is the Least Common Multiple (LCM) of 36 and 45?

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Answer ................................................

(1)

(Total 5 marks)

**5.** (a) What is the least common multiple (LCM) of 9 and 12?

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Answer ..............................................................

(2)

(b) Write 108 as the product of its prime factors.

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Answer ..............................................................

(2)

(Total 4 marks)

**6.** Express 360 as a product of its prime factors.  
Give your answer in index form.

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Answer .....................................................

(Total 3 marks)

**7.** Write 108 as the product of its prime factors.  
Give your answer in index form.

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Answer ..............................................................

(Total 3 marks)

**8.** Express 120 as the product of its prime factors.   
Give your answer in index form.

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Answer ............................................................

(Total 3 marks)