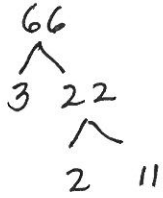


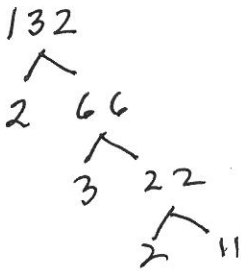
7 (a) Express 66 as a product of its prime factors.



$$66 = 3 \times 2 \times 11$$

(2)

(b) Express 132^2 as a product of its prime factors.



$$(132)^2 = 2 \times 3 \times 2 \times 11 \times 2 \times 3 \times 2 \times 11$$

(2)

l. (a) Find the highest common factor (HCF) of 24 and 30

$$24 = 3 \times 2 \times 2 \times 2$$

$$30 = 3 \times 2 \times 5$$

$$\text{HCF} = 3 \times 2 = 6$$

(b) Find the lowest common multiple (LCM) of 4, 5 and 6

$$\text{LCM} = 4 \times 5 \times 6 = 120$$

3. (a) Express 45 as a product of its prime factors.

$$45 = 3 \times 5 \times 3$$

.....
(2)

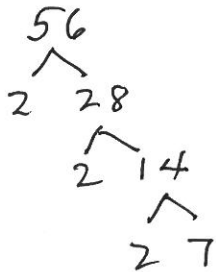
(b) Find the Highest Common Factor (HCF) of 45 and 30

$$45 = 3 \times 5 \times 3$$

$$30 = 3 \times 5 \times 2$$

$$\text{HCF} = 3 \times 5 = 15$$

20. (a) Write 56 as a product of its prime factors.



$$56 = 2 \times 2 \times 2 \times 7$$

.....
(2)

(b) Find the Highest Common Factor (HCF) of 56 and 42

$$56 = 2 \times 2 \times 2 \times 7$$

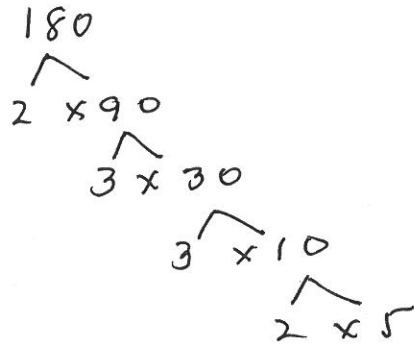
$$42 = 2 \times 3 \times 7$$

$$\text{HCF} = 2 \times 7 = 14$$

.....
(2)

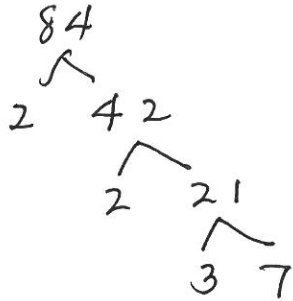
(Total 4 marks)

15. Express 180 as a product of its prime factors.



$$180 = 2 \times 3 \times 3 \times 2 \times 5$$

15. (a) Express 84 as a product of its prime factors.



$$84 = 2 \times 2 \times 3 \times 7$$

.....
(3)

(b) Find the Highest Common Factor (HCF) of 84 and 35

$$84 = 2 \times 2 \times 3 \times 7$$

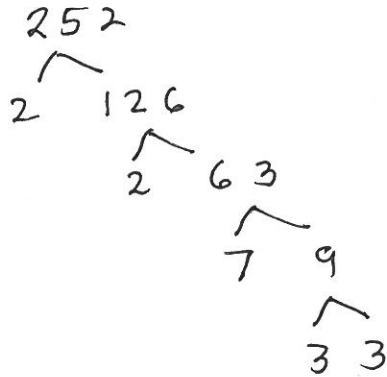
$$35 = 5 \times 7$$

$$\text{HCF} = 7$$

.....
(2)

(Total 5 marks)

16. (a) Express 252 as a product of its prime factors.



$$252 = 2 \times 2 \times 3 \times 3 \times 7$$

.....
(3)

James thinks of two numbers.

He says "The Highest Common Factor (HCF) of my two numbers is 3
The Lowest Common Multiple (LCM) of my two numbers is 45"

(b) Write down two numbers that James could be thinking of.

15 and 9

$$15 = 3 \times 5$$

$$9 = 3 \times 3$$

5. Work out the Highest Common Factor (HCF) of 24 and 64

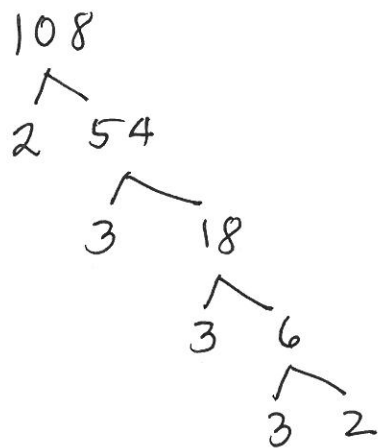
$$24 = 2 \times 2 \times 2 \times 3$$

$$64 = 2 \times 2 \times 2 \times 2 \times 2 \times 2$$

$$\text{HCF} = 8$$

.....
(Total 2 marks)

(b) Express 108 as a product of its prime factors.



$$108 = 2 \times 2 \times 3 \times 3 \times 3$$

