

Highest Common Factor

List the factors of :

- (a) 8 (b) 10 (c) 30

Use your lists to find the highest common factor (HCF) of:

- (i) 10 and 30 (ii) 8 and 10
(iii) 8 and 30 (iv) 8, 10 and 30

(a) 1, 2, 4, 8 (b) 1, 2, 5, 10

(c) 1, 2, 3, 5, 6, 10, 15, 30

(i) 10 (ii) 2

(iii) 2 (iv) 2

List the factors of :

- (a) 9 (b) 15 (c) 40

Use your lists to find the highest common factor (HCF) of:

- (i) 9 and 15 (ii) 15 and 40
(iii) 9 and 40 (iv) 9, 15 and 40

(a) 1, 3, 9 (b) 1, 3, 5, 15

(c) 1, 2, 4, 5, 8, 10, 20, 40

(i) 3 (ii) 5

(iii) 1 (iv) 1

Find the highest common factor (HCF) of:

- (a) 30 and 42
(b) 36 and 60
(c) 25 and 125
(d) 80 and 120
(e) 72 and 90
(f) 168 and 288

(a) 6

(b) 12

(c) 25

(d) 40

(e) 18

(f) 12

(a) Mia has some identical boxes of biscuits. In total there are 60 custard creams, 72 ginger biscuits and 90 bourbon biscuits. What is the largest number of boxes of biscuits Mia can have?

(b) Jack and Jill both keep chickens. Jack's chickens have laid 84 eggs and Jill's chickens have laid 108 eggs. They want to buy some egg boxes and want the eggs to fit exactly into the box, without mixing their eggs. What is the largest egg box they could buy?

(a) 6 boxes

(b) Boxes for 12 eggs

Find the highest common factor of:

- (a) 24, 36 and 60
(b) 54, 72, and 90
(c) 64, 96 and 112

(a) 12

(b) 18

(c) 16