

- (a) 4 and 8 (b) 4 and 10 (c) 3 and 15
(d) 9 and 12 (e) 10 and 25 (f) 35 and 49
(g) 2, 4 and 8 (h) 4, 6 and 8 (i) 3, 6 and 9
(j) 6, 9 and 15 (k) 8, 12 and 16 (l) 18, 24 and 32
- Find the HCF by prime factorization:**
- 37.** (a) 45 and 30 (b) 45 and 75 (c) 30 and 105
(d) 54 and 81 (e) 64 and 80 (f) 58 and 174
(g) 72 and 126 (h) 165 and 275 (i) 480 and 720
38. (a) 12, 36 and 48 (b) 25, 40 and 60
(c) 40, 48 and 72 (d) 56, 42 and 140
(e) 44, 121 and 132 (f) 128, 136 and 512
39. (a) 140 and 196 (b) 352 and 192
(c) 216 and 630 (d) 540, 315 and 360
(e) 216, 324 and 1350
40. (a) 170, 238 (b) 504, 980
(c) 72, 108, 180 (d) 84, 120, 138
(e) 106, 159, 371 (f) 272, 425
(g) 144, 252, 630 (h) 1197, 5320, 4389
- Find the HCF, using the division method (*Using Euclid's division algorithm*):
- 41.** (a) 390 and 663 (b) 856 and 936
(c) 837 and 1134 (d) 504 and 5292
(e) 775 and 1800 (f) 1435 and 3535
(g) 7625 and 8175 (h) 1020 and 11594
(i) 5610 and 10465 (j) 12350 and 6845
(k) 10568 and 9247 (l) 3536 and 33150
42. (a) 256, 442 and 940 (b) 192, 576 and 1760
(c) 639, 873 and 747 (d) 612, 816 and 448
(e) 176, 1100 and 4444 (f) 808, 568 and 1112
(g) 432, 1134 and 1347 (h) 345, 726 and 531
43. (a) 1233, 726, 531 and 345
(b) 1326, 3094, 4420 and 5577
44. (a) 58, 70 (b) 399, 437
(c) 960, 1575 (d) 1045, 1520
(e) 1965, 2096 (f) 2241, 2324
(g) 658, 940, 1128 (h) 754, 1508, 1972
(i) 391, 425, 527 (j) 1794, 2346, 4761
- 45.** Show that the following pairs are co-primes:
(a) 59, 97 (b) 161, 192 (c) 343, 432
(d) 512, 945 (e) 385, 621 (f) 847, 1014
- 46.** Find, by inspection, the LCM of each pair of numbers:
- (a) 2 and 4 (b) 3 and 6 (c) 4 and 8
(d) 6 and 12 (e) 5 and 10 (f) 9 and 3
(g) 20 and 10 (h) 6 and 10 (i) 6 and 16
(j) 12 and 16 (k) 10 and 15 (l) 12 and 18
- 47.** Find, orally, the LCM of each group of numbers:
(a) 2, 3 and 4 (b) 4, 6 and 12 (c) 2, 6 and 8
(d) 4, 8 and 12 (e) 4, 12 and 18 (f) 2, 9 and 18
(g) 9, 12 and 18 (h) 8, 9 and 12 (i) 5, 10 and 15
- Find the LCM, using prime factorization:**
- 48.** (a) 4 and 6 (b) 6 and 9 (c) 8 and 12
(d) 4 and 22 (e) 4 and 26 (f) 6 and 21
(g) 6 and 27 (h) 8 and 28 (i) 10 and 25
(j) 15 and 25 (k) 25 and 80 (l) 75 and 120
49. (a) 10, 12 and 36 (b) 21, 63 and 105
(c) 45, 84 and 90 (d) 54, 60 and 90
(e) 13, 39 and 65

- (a) 4 and 8 (b) 4 and 10 (c) 3 and 15
(d) 9 and 12 (e) 10 and 25 (f) 35 and 49
(g) 2, 4 and 8 (h) 4, 6 and 8 (i) 3, 6 and 9
(j) 6, 9 and 15 (k) 8, 12 and 16 (l) 18, 24 and 32
- Find the HCF by prime factorization:**
- 37.** (a) 45 and 30 (b) 45 and 75 (c) 30 and 105
(d) 54 and 81 (e) 64 and 80 (f) 58 and 174
(g) 72 and 126 (h) 165 and 275 (i) 480 and 720
38. (a) 12, 36 and 48 (b) 25, 40 and 60
(c) 40, 48 and 72 (d) 56, 42 and 140
(e) 44, 121 and 132 (f) 128, 136 and 512
39. (a) 140 and 196 (b) 352 and 192
(c) 216 and 630 (d) 540, 315 and 360
(e) 216, 324 and 1350
40. (a) 170, 238 (b) 504, 980
(c) 72, 108, 180 (d) 84, 120, 138
(e) 106, 159, 371 (f) 272, 425
(g) 144, 252, 630 (h) 1197, 5320, 4389
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(e) 775 and 1800 (f) 1435 and 3535
(g) 7625 and 8175 (h) 1020 and 11594
(i) 5610 and 10465 (j) 12350 and 6845
(k) 10568 and 9247 (l) 3536 and 33150
42. (a) 256, 442 and 940 (b) 192, 576 and 1760
(c) 639, 873 and 747 (d) 612, 816 and 448
(e) 176, 1100 and 4444 (f) 808, 568 and 1112
(g) 432, 1134 and 1347 (h) 345, 726 and 531
43. (a) 1233, 726, 531 and 345
(b) 1326, 3094, 4420 and 5577
44. (a) 58, 70 (b) 399, 437
(c) 960, 1575 (d) 1045, 1520
(e) 1965, 2096 (f) 2241, 2324
(g) 658, 940, 1128 (h) 754, 1508, 1972
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- 45.** Show that the following pairs are co-primes:
(a) 59, 97 (b) 161, 192 (c) 343, 432
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- 46.** Find, by inspection, the LCM of each pair of numbers:
- (a) 2 and 4 (b) 3 and 6 (c) 4 and 8
(d) 6 and 12 (e) 5 and 10 (f) 9 and 3
(g) 20 and 10 (h) 6 and 10 (i) 6 and 16
(j) 12 and 16 (k) 10 and 15 (l) 12 and 18
- 47.** Find, orally, the LCM of each group of numbers:
(a) 2, 3 and 4 (b) 4, 6 and 12 (c) 2, 6 and 8
(d) 4, 8 and 12 (e) 4, 12 and 18 (f) 2, 9 and 18
(g) 9, 12 and 18 (h) 8, 9 and 12 (i) 5, 10 and 15
- Find the LCM, using prime factorization:**
- 48.** (a) 4 and 6 (b) 6 and 9 (c) 8 and 12
(d) 4 and 22 (e) 4 and 26 (f) 6 and 21
(g) 6 and 27 (h) 8 and 28 (i) 10 and 25
(j) 15 and 25 (k) 25 and 80 (l) 75 and 120
49. (a) 10, 12 and 36 (b) 21, 63 and 105
(c) 45, 84 and 90 (d) 54, 60 and 90
(e) 13, 39 and 65

- (g) 45, 125 and 225 (h) 240, 320 and 360
50. (a) 25, 30 and 40 (b) 42, 36 and 21
(c) 26, 14 and 91 (d) 36, 60, 84 and 90
51. (a) 36, 60, 72 (b) 36, 40, 126
(c) 16, 28, 40, 77 (d) 28, 36, 45, 60
(e) 144, 180, 384 (f) 48, 64, 72, 96, 108
- Find the LCM of the numbers by division:**
- 52.** (a) 21, 63 and 105 (b) 64, 96 and 112
(c) 12, 18 and 90 (d) 45, 35 and 21
53. (a) 15, 45, 125 and 225 (b) 44, 126, 198 and 280
(c) 4, 6, 8, 12, 18 and 90 (d) 12, 36, 16, 24 and 32
(e) 16, 90, 91, 280 and 455
- 54.** Find the LCM of the numbers by finding their HCF:
- (a) 110 and 88 (b) 420 and 360 (c) 204 and 255
- 55.** Reduce each of the following fractions to the lowest terms:
- (a) $\frac{207}{161}$ (b) $\frac{517}{799}$ (c) $\frac{296}{481}$ (d) $\frac{1095}{1168}$ (e) $\frac{368}{496}$
- 56.** Find the HCF and LCM of
- (a) 117, 221 (b) 234, 572 (c) 693, 1078
(d) 145, 232 (e) 861, 1353 (f) 2923, 3239
(g) 17, 23, 29 (h) 24, 36, 40 (i) 30, 72, 432
- 57.** For each pair of numbers, verify that their product = (HCF \times LCM).
- (a) 87, 145 (b) 186, 403 (c) 490, 1155
- 58.** Find the greatest number that will divide 24 and 36 without leaving a remainder.
- 59.** Find the greatest number that will divide 22, 33 and 44 without leaving a remainder.
- 60.** Find the greatest number that will divide 33 and 45 leaving a remainder 9 in each case.
- 61.** What is the largest number that will divide 61, 33 and 75 leaving Sas remainder In each case?
- 62.** Find the greatest number that will divide 39, 52 and 65 leaving remainders 3, 4 and 5 respectively.
- 63.** Find the least number which when divided by 12 and 18, leaves no remainder.
- 64.** Find the least number which is exactly divisible by each of the numbers 6, 15 and 18.
- 65.** Find the least number which when divided by 15 and 25, leaves 1 as remainder in each case.
- 66.** Find the least number which when divided by 18 and 12, leaves 5 as remainder in each case.
- 67.** The product of two numbers is 48 and their HCF is 2. Find their LCM.
- 68.** The product of two numbers is 875 and their HCF is 5. Find their LCM.
- 69.** The product of two numbers is 108 and their LCM is 36. Find their HCF.
- 70.** The product of two numbers is 216 and their LCM is 36. Find their HCF.
- 71.** The HCF of two numbers is 3 and their LCM is 36. If one of the numbers is 12, find the other number.
- 72.** The HCF of two numbers is 8 and their LCM is 96. If one of the numbers is 24, find the other number.