

- (f) $25 \div 5$ of 5×2 of $3 + 7 - 6$
 (g) 125 of $4 \div 10$ of $5 - 9$ of $7 + 160 \div 2$
 (h) $12 \div 4$ of $3 \div 7 - 2 \times 4$
 (i) $4900 \div 350 \times 145$
 (j) $220 + 24 \times 60 - 1089 \div 99$
 (k) $322 \times 3773 \div 343$ (l) $4875 \div 195 \times 480$
 (m) $4900 \div 350 \times 145$
 (n) $220 + 24 \times$ of $60 - 1089 \div 99$
 (o) $3960 \div 264 + 5742 \div 522 \times 30$
 (p) $3125 \div 125 - 2055 \div 411 - 20$
- 70. Simplify the following:**
 (a) $(16 + 12) - (2 \times 6)$ (b) $84 \div (72 \div 6)$
 (c) $(83 - 38) \times 15$ (d) $(20 \times 8) \div (10$ of $4)$
 (e) $24 + 15 \div 3 \times (4 - 2)$
 (f) $(15 \times 3) \div 5 \times 8 - 2 + 6 \times (8 - 2)$
- 71. Simplify the following and verify whether they are equal.**
 (a) $12 \times 6 \div 3$ and $12 \times (6 \div 3)$
 (b) $(11 \times 8) - 6$ and $11 \times (8 - 6)$
- 72. Simplify the following:**
 (a) $5 \times (19 - (15 - 6))$ (b) $20 + (5 \times (72 - 42))$
 (c) $40 - \{(17 - 3) \div (20 - 13)\}$
 (d) $(30 \div 10) + \{6 \times (12 \div 3)\}$
 (e) $\{7 + (5 \times 3)\} - 12 + 6$ of 3

EXERCISE 1C

- Write down all the factors of
 (a) 23 (b) 18 (c) 24 (d) 27 (e) 36 (f) 60 (g) 75
- Write the first five multiples of each of the following numbers:
 (a) 5 (b) 8 (c) 9 (d) 17 (e) 23 (f) 65 (g) 70
- Which of the following numbers are even and which are odd?
 (a) 44 (b) 24 (c) 18 (d) 32 (e) 37 (f) 50
 (g) 58 (h) 69 (i) 144 (j) 321 (k) 253 (l) 952
- Find which of the following numbers are primes:
 (a) 23 (b) 51 (c) 89 (d) 37 (e) 91 (f) 103
 (g) 137 (h) 161 (i) 179 (j) 217 (k) 277 (l) 331
- Which of the following numbers are divisible by 2?
 (a) 11, 24, 30, 95, 99 (b) 100, 109, 427, 524
 (c) 1346, 4235, 5002, 10100
- Which of the following numbers are divisible by 10?
 (a) 10, 15, 30, 48, 70
 (b) 145, 1200, 470, 50, 505
- Which of the following numbers are divisible by 5?
 (a) 5, 6, 8, 9, 7 (b) 10, 22, 35, 60, 95
- Which of the following numbers are divisible by 3?
 (a) 12, 17, 45, 96, 62 (b) 111, 320, 428, 732
 (c) 1234, 3150, 5022, 8102
- In each of the following, find the smallest number that should be added to the number to get a number divisible by 5.
 (a) 1456 (b) 43217 (c) 639210 (d) 900003
- In each of the following, find the smallest number that should be subtracted from the

- number to get a number divisible by 10.
 (a) 1234 (b) 3060 (c) 45679 (d) 900093
- 11. Test the divisibility of the following numbers by 2,3,4,5,6,7,8,9,10,11,12,15:**
 2650 69435 59628 789403 357986
 733 367314 10038 20701 79124
 524781 872645 618 2314 63712
 35056 4965 23590 946126 810524
 35208 2070 124684 723405 46523
 71232 438750 934706 117 826
 251780 872536 2345 6021 14126
 25368 9364 2138 36792 901674
 2358 3333 136976 1790184 98712
 5790 647514 326999 63215 55555
 4334 257106 83721 66311 137269
 901351 129 4896 79968 8790322
 123452 390 7825 90875 406839
- 12. Which of the following numbers are divisible by 2 but not by 4?**
 (a) 28 (b) 316 (c) 2456 (d) 9026 (e) 726352
- 13. Which each of the following numbers, replace * by the smallest number to make it divisible by 3:**
 (a) 27*4 (b) 53*46 (c) 8*711 (d) 62*35
 (e) 234*17 (f) 6*1054 (g) *6724 (h) 4765*2
- 14. In each of the following numbers, replace * by the smallest number to make it divisible by 9:**
 (a) 65*5 (b) 2*135 (c) 6702* (d) 91*67
 (e) 6678*1 (f) 835*86 (g) 987*2 (h) 64*514
- 15. In each of the following numbers, replace * by the smallest number to make it divisible by 11:**
 (a) 26*5 (b) 39*43 (c) 86*72 (d) 467*91
 (e) 1723*4 (f) 9*8071 (g) 92*389 (h) 8*9484
- 16. Test the divisibility of:**
 (a) 10000001 by 11 (b) 19083625 by 11
 (c) 2134563 by 9 (d) 10001001 by 3
- 17. Select the coprime numbers from the following pairs of numbers.**
 (a) 18 and 17 (b) 36 and 25 (c) 35 and 21
- 18. Find the common factors of:**
 (a) 20 and 28 (b) 15 and 25 (c) 35 and 50
 (d) 56 and 120 (e) 4, 8 and 12 (f) 5, 15 and 25
- 19. Find first three common multiples of:**
 (a) 6 and 8 (b) 12 and 18
- 20. Which of the following numbers are co-prime?**
 (a) 18 and 35 (b) 15 and 37 (c) 30 and 415
 (d) 17 and 68 (e) 216 and 215 (f) 81 and 16
- 21. Give the prime factorization of each of the following numbers:**
 (a) 12 (b) 18 (c) 48 (d) 56 (e) 90
 (f) 136 (g) 252 (h) 420 (i) 637 (j) 945
 (k) 1224 (l) 1323 (m) 8712 (n) 9317 (o) 1035
 (p) 1197 (q) 4641 (r) 4335 (s) 2907 (t) 13915
- 22. Find, by inspection, the HCF of the following pairs of numbers:**
 (a) 2 and 4 (b) 4 and 6 (c) 3 and 12
 (d) 6 and 9 (e) 8 and 12 (f) 10 and 15
 (g) 16 and 24 (h) 18 and 27 (i) 30 and 40
 (j) 22 and 33 (k) 11 and 15 (l) 13 and 8
- 23. Find the HCF by finding factors:**

EXERCISE 1A

- Express the following numbers in words:
 (a) 3013 (b) 4444 (c) 32108 (d) 60345
 (e) 87650 (f) 100325 (g) 654019 (h) 3336669
- Write the numeral for each of the following numbers:
 (a) Nine thousand eighteen
 (b) Fifty-four thousand seventy-three
 (c) Three lakh two thousand five hundred six
 (d) Twenty lakh ten thousand eight
 (e) Six crore five lakh fifty-seven
 (f) Two crore two lakh two thousand two hundred two
 (g) Twelve crore twelve lakh twelve thousand twelve
 (h) Fifteen crore fifty lakh twenty thousand sixty-eight
- Place commas correctly and write the numerals:
 (a) Seventy three lakh seventy five thousand three hundred seven.
 (b) Nine crore five lakh forty one.
 (c) Seven crore fifty two lakh twenty one thousand three hundred two.
 (d) Fifty eight million four hundred twenty three thousand two hundred ten.
 (e) Twenty three lakh thirty thousand ten.
- Insert commas suitably and write the names according to Indian System of Numeration :
 (a) 87595762 (b) 8546283 (c) 99900046
- Insert commas suitably and write the names according to International System of Numeration :
 (a) 78921092 (b) 7452283 (c) 99985102
- Fill in the blanks.
 (a) 1 million = ... lakh (b) 1 crore = ... million
- Write each of the following numbers in expanded form:
 (a) 15,768 (b) 3,08,927 (c) 24,05,609
 (d) 5,36,18,493 (e) 6,06,06,006 (f) 9,10,10,510
- Write the corresponding numeral for each of the following:
 (a) $6 \times 10000 + 2 \times 1000 + 5 \times 100 + 8 \times 10 + 4 \times 1$
 (b) $5 \times 100000 + 8 \times 10000 + 1 \times 1000 + 6 \times 100 + 2 \times 10 + 3 \times 1$
 (c) $2 \times 10000000 + 5 \times 100000 + 7 \times 1000 + 9 \times 100 + 5 \times 1$
 (d) $3 \times 1000000 + 4 \times 100000 + 6 \times 1000 + 5 \times 100 + 7 \times 1$
- Fill in the blanks with '<' or '>':
 (a) 1000 □ 999 (b) 4567 □ 1980
 (c) 3298 □ 3412 (d) 93850 □ 93800
 (e) 12345 □ 11999 (f) 99999 □ 111111
 (g) 456789 □ 456123 (h) 198765 □ 198599
 (i) 900123 □ 897654 (j) 100009 □ 100010
 (k) 1003467 □ 987965 (l) 3572014 □ 10235401

- Write the number coming just before the given number:
 (a) 42678 (b) 998866 (c) 124680 (d) 9900000
- Write the number coming just after the given number:
 (a) 87654 (b) 668899 (c) 986421 (d) 9547999
- Arrange the following numbers in ascending order:
 (a) 9876, 8678, 999, 4567, 9, 1843
 (b) 6666, 55555, 777, 88, 9, 90000
 (c) 100000, 8, 94321, 98888, 546001, 11
 (d) 450023, 9, 87615, 9867, 20, 448, 399
 (e) 66633, 33, 8001, 200005, 7, 876
 (f) 9873426, 24615019, 990357, 9874012, 24620010
 (g) 56943201, 5694437, 56944000, 5695440, 56943300
 (h) 700087, 8014257, 8015032, 10012458, 8014306
- Arrange the following numbers in descending order:
 (a) 1234, 2400, 4256, 976, 81, 6
 (b) 3214, 65, 888, 9870, 10910, 3
 (c) 67890, 80076, 88809, 765, 8, 3481
 (d) 3333, 44444, 999, 77, 9, 80000
 (e) 200000, 12349, 88889, 100645, 7, 89
 (f) 63521047, 7354206, 63514759, 7355014, 102345680
 (g) 5032786, 23794206, 5032790, 23756819, 987876
 (h) 190909, 1808088, 16060666, 16007777, 181888, 1808090
 (i) 199988, 1704382, 200175, 1702497, 201200, 1712040
- Write all 3-digit numbers using 2, 3, 4, taking each digit only once.
- Round each of the following numbers to the nearest ten:
 (a) 35 (b) 86 (c) 173 (d) 3869 (e) 16378
- Round each of the following numbers to the nearest hundred:
 (a) 814 (b) 1254 (c) 43126 (d) 98165
- Round each of the following numbers to the nearest thousand:
 (a) 793 (b) 4826 (c) 16719 (d) 28394
- Round each of the following numbers to the nearest ten thousand:
 (a) 17514 (b) 26340 (c) 34890 (d) 272685
- Estimate each sum to the nearest ten:
 (a) 57 + 34 (b) 43 + 78 (c) 14 + 69
 (d) 86 + 19 (e) 95 + 58 (f) 77 + 63
 (g) 356 + 275 (h) 463 + 182 (i) 538 + 276
- Estimate each sum to the nearest hundred:
 (a) 236 + 689 (b) 458 + 324
 (c) 170 + 395 (d) 3280 + 4395

- (e) 5130 + 1410 (f) 10083 + 29380
- 21.** Estimate each difference to the nearest ten:
(a) 53 - 18 (b) 97 - 38 (c) 409 - 148
- 22.** Estimate each difference to the nearest hundred:
(a) 678 - 215 (b) 957 - 578
(c) 7258 - 2429 (d) 5612 - 3095
- 23.** Estimate each difference to the nearest thousand:
(a) 35863 - 27677 (b) 47005 - 39488
- 24.** Estimate each of the following products by rounding off each number to the nearest ten:
(a) 38×63 (b) 54×47 (c) 28×63
(d) 42×75 (e) 64×58 (f) 15×34
- 25.** Estimate each of the following products by rounding off each number to the nearest hundred:
(a) 376×123 (b) 264×147 (c) 423×158
(d) 509×179 (e) 392×138 (f) 271×339
- 26.** Estimate each of the following products by rounding off the first number upwards and the second number downwards:
(a) 183×154 (b) 267×146 (c) 359×76
(d) 472×158 (e) 680×164 (f) 255×350
- 27.** Estimate each of the following products by rounding off the first number downwards and the second number upwards:
(a) 356×278 (b) 472×76 (c) 578×369
- 28.** Find the estimated quotient for each of the following:
(a) $87 \div 28$ (b) $83 \div 17$ (c) $75 \div 23$
(e) $725 \div 23$ (f) $275 \div 25$
(g) $633 \div 33$ (h) $729 \div 29$ (i) $858 \div 39$
- 29.** Express each of the following as a Roman numeral:
(a) 8 (b) 14 (c) 29 (d) 36 (e) 43 (f) 54
(g) 61 (h) 73 (i) 81 (j) 95 (k) 99 (l) 105
(m) 114 (n) 164 (o) 195 (p) 226 (q) 341 (r) 475
(s) 596 (t) 611 (u) 520 (v) 621 (w) 759 (x) 819
- 30.** Write each of the following as a Hindu-Arabic numeral:
(a) XXVII (b) XXXIV (c) XLV (d) LIV
(e) LXXIV (f) XCI (g) XCVI (h) CXI
(i) CLIV (j) CCXXIV (k) CCCLXV (l) CDXIV
(m) CDLXIV (n) DVI (o) DCCLXVI
- 31.** Show that each of the following is meaningless. Give reason in each case.
(a) VC (b) IL (c) VII (d) IX

EXERCISE 1B

Arrange in columns and add:

- 1.** (a) $12129 + 24456 + 96543$
(b) $34436 + 5061 + 343 + 2$
(c) $710109 + 94087 + 4354 + 76789 + 235$
- 2.** (a) 51321 and 43267
(b) 41212, 32123 and 5454
(c) 11211, 2122, 33133 and 523
(d) 644531 and 243245
(e) 1122, 34344, 31211 and 20001

- (f) 50, 505, 5001 and 50102
- 3.** (a) 654365 and 567567
(b) 898988 and 9999999
(c) 444333, 556606 and 777888
- Add:**
- 4.** (a) $23456 + 71241$ (b) $34120 + 45230$
(c) $62507 + 4092$ (d) $40065 + 38713$
(e) $87654 + 321$ (f) $80704 + 3203$
- 5.** (a) $341125 + 124563$ (b) $415306 + 372002$
(c) $53724 + 612053$
- 6.** (a) $43265 + 12521 + 24012$
(b) $63143 + 2512 + 1133$
(c) $234567 + 42012 + 3220$
(d) $24 + 241 + 2310 + 24302$
(e) $123456 + 12332 + 1210 + 2001$
(f) $5 + 51 + 510 + 87103$
- 7.** (a) $16975 + 64806$ (b) $62402 + 24659$
(c) $52876 + 58693$ (d) $74251 + 3969$
(e) $4875 + 92665$ (f) $936 + 52186$
- 8.** (a) $265849 + 373246$ (b) $527496 + 236540$
(c) $43857 + 649763$ (d) $300242 + 729734$
- 9.** (a) $23678 + 14972 + 55031$
(b) $12345 + 54321 + 345678$
(c) $468024 + 135791 + 56789$
(d) $4567 + 34567 + 234567$
(e) $56784 + 7654 + 456$
(f) $24680 + 678901 + 213140$
- 10.** (a) $13579 + 24680 + 50321 + 11892$
(b) $567897 + 43211 + 189458 + 219$
(c) $66556 + 4446 + 336 + 26$
- 11.** (a) $456456 + 367890$
(b) $1234567 + 8907865$
(c) $77889908 + 7543217 + 85685685$
(d) $4488997 + 3322115 + 5544332$
- 12.** (a) $11889966 + 5566787 + 95087654 + 32100645$
(b) $7788665 + 2223334 + 5567890 + 6565656$

Arrange in columns and subtract:

- 13.** (a) $45554 - 32103$ (b) $39876 - 18540$
(c) $799967 - 543217$ (d) $123456 - 112233$
- 14.** (a) $74321 - 35648$ (b) $97654 - 38899$
(c) $654321 - 66778$ (d) $958822 - 9933$
- 15.** (a) Subtract 76765 from 94320.
(b) Subtract 464646 from 853420.
- Subtract**
- 16.** (a) $8789 - 4506$ (b) $99887 - 55443$
(c) $66543 - 42310$ (d) $4436 - 12345$
(e) $61524 - 31312$ (f) $95468 - 3125$
- 17.** (a) $678953 - 215432$ (b) $554433 - 221103$
(c) $789987 - 112283$ (d) $654321 - 321211$
(e) $876655 - 443322$ (f) $653105 - 41004$
- 18.** (a) $97654 - 38799$ (b) $55443 - 16744$
(c) $67895 - 28996$ (d) $78978 - 29989$
(e) $34567 - 2089$ (f) $10000 - 2345$
- 19.** (a) $545454 - 167895$ (b) $666555 - 277896$
(c) $607054 - 129765$ (d) $330065 - 148978$
(e) $100000 - 12345$ (f) $226655 - 789$
- 20.** (a) $780605 - 391236$ (b) $4321657 - 1432987$
(c) $3322117 - 2424248$ (d) $7895432 - 1689654$

- (e) 10060708 - 1278909 (f) 65656565 - 16768687
- 21.** Fill in the blanks:
(a) $1235 + \square = 2000$ (b) $51047 + \square = 100000$
(c) $\square + 792 = 10000$ (d) $\square + 9999 = 40000$
(e) $22222 - \square = 5000$ (f) $\square - 1234 = 12345$
- Simplify:**
- 22.** (a) $8 - 2 + 3$ (b) $7 + 3 - 5$
(c) $15 + 12 - 14$ (d) $81 + 87 - 69$
(e) $182 - 97 + 49$ (f) $248 - 132 - 15$
(g) $289 - 195 + 234$ (h) $527 + 419 - 497$
(i) $1825 + 380 - 1567$ (j) $1250 + 495 - 321 - 157$
(k) $1089 - 197 - 47 + 1256$
(l) $298 + 596 - 293 - 392$
(m) $503 - 1437 - 246 + 1375 - 95$
(n) $10000 - 999 + 8888 - 6665 + 777 - 555$
- 23.** (a) $656666 + 432141 - 765432$
(b) $7898976 - 5898999 + 3213213$
(c) $52345678 - 43216789 + 56565656$
(d) $96596596 - 56432107 - 12340087$
- Find:**
- 24.** (a) 13×30 (b) 15×40 (c) 16×50 (d) 111×60
(e) 101×70 (f) 11×80 (g) 201×90 (h) 301×90
- 25.** (a) 12×200 (b) 15×300 (c) 16×400
(d) 111×500 (e) 101×600 (f) 17×700
(g) 102×800 (h) 111×900 (i) 201×900
(j) 102×900 (k) 13×3000
- 26.** (a) 11×1000 (b) 12×2000 (c) 13×3000
(d) 14×4000 (e) 15×5000 (f) 16×6000
(g) 17×7000 (h) 12×8000 (i) 11×9000
(j) 12×1000 (k) 1234×10
- 27.** (a) 76×100 (b) 124×200 (c) 102×400
(d) 36×20 (e) 34×12 (f) 33×13
- 28.** (a) 22×13 (b) 34×12 (c) 33×13
(d) 56×11 (e) 63×11 (f) 99×11
- 29.** (a) 102×33 (b) 123×13 (c) 213×13
(d) 412×12 (e) 506×11 (f) 1011×15
(g) 2013×13 (h) 3013×13 (i) 4004×12
(j) 14×28 (k) 26×13 (l) 37×35
(d) 43×51 (e) 54×63 (f) 98×77
- 30.** (a) 455×34 (b) 543×61 (c) 637×72
(d) 897×82 (e) 985×79 (f) 999×99
(g) 141×21 (b) 324×22 (c) 567×11
- 31.** (a) 4554×34 (b) 543×61 (c) 637×72
(d) 897×82 (e) 985×79 (f) 999×99
- 32.** (a) 141×21 (b) 324×22 (c) 567×11
(d) 321×312 (e) 432×221 (f) 332×323
- 33.** (a) 134×202 (b) 313×103 (c) 657×101
- 34.** (a) 1233×123 (b) 3321×332 (c) 4567×111
- 35.** (a) 375×25 (b) 2408×79 (c) 1357×86
- 36.** (a) 429×103 (b) 738×108 (c) 235×302
- 37.** (a) 294×132 (b) 312×216 (c) 412×233
- 38.** (a) $12 \times 3 \times 4$ (b) $3 \times 4 \times 15$ (c) $20 \times 5 \times 6 \times 8$
- 39.** (a) 4132×27 (b) 6309×36 (c) 23008×95
- 40.** (a) 3688×456 (b) 7089×789 (c) 60878×808
- 41.** (a) 2308×8032 (b) 1234×4321
(c) 81009×8989 (d) 92002×23043
- 42.** (a) 1478×5000 (b) 94×70000 (c) 79×12000
- 43.** Multiply:
(a) 1235 by 38 (b) 3167 by 74 (c) 4257 by 45
(d) 6389 by 69 (e) 2331 by 302 (f) 5678 by 101
- 44.** Simplify:
(a) $4 \times 5 - 3 \times 2$ (b) $8 \times 2 - 4 \times 3$
(c) $7 \times 8 - 6 \times 4 + 5 \times 3$ (d) $10 \times 5 - 12 \times 7 + 8 \times 9$