**Essential Maths 1 Numbers and Symbols**

1. Why do managers have to understand quantitative ideas?
   1. To impress their colleagues
   2. To understand the accounts
   3. To make informed decisions
   4. To give mental exercise
2. Which of the following is true?
   1. a positive number is always greater than a negative number
   2. a negative number is always greater than a positive number
   3. positive and negative numbers can be the same size
   4. you cannot compare positive and negative numbers
3. What do you get when you add a positive number to a negative number
4. a positive number
5. a negative number
6. either a positive or negative number
7. an imaginary number
8. What do you get when you subtract a positive number from a negative number
   1. a positive number
   2. a negative number
   3. either a positive or negative number
   4. an imaginary number
9. What does 5 + (-2) + (-5) – 6 – (-3) equal?
   1. -11
   2. 5
   3. -21
   4. -5

1. What is -10 –5 – ( –2) + ( –4)
   1. 21
   2. -17
   3. -21
   4. -4
2. What do you get when you multiply a positive number by a negative number
   1. a positive number
   2. a negative number
   3. either a positive or negative number
   4. an imaginary number
3. What do you get when you multiply one negative number by another negative number
   1. a positive number
   2. a negative number
   3. either a positive or negative number
   4. an imaginary number
4. What do you get when you divide one negative number by another negative number
   1. a positive number
   2. a negative number
   3. either a positive or negative number
   4. an imaginary number
5. What is –20/-4 +1?
   1. 4
   2. -4
   3. 6
   4. 5
6. Calculate - 4 + -10/-5
   1. - 2
   2. – 6
   3. 14/5
   4. -14/5
7. In what order should you do calculations?
   1. multiplication then addition, division and subtraction
   2. addition and subtraction followed by multiplication then division
   3. multiplication and division followed by addition and subtraction
   4. It does not matter which order you do them
8. How do you change the order of arithmetic
   1. By adding brackets
   2. By using scientific notation
   3. By using a calculator
   4. You cannot change the order
9. Evaluate
   1. -90
   2. 19
   3. 90
   4. -1
10. What is ((-3) ×(-4+2))/(-5+8)
    1. -2
    2. 3
    3. -6
    4. 2

1. Calculate 4 x 7 + ( 120/3 + 5 - 3 x 7 )
   1. 82
   2. 52
   3. 22
   4. 124
2. Express 24.326917 to 3 decimal places
   1. 24.320
   2. 24.326
   3. 24.327
   4. 24.330
3. What is 40001.618 to 2 significant figures
   1. 40000
   2. 40001
   3. 40002
   4. 40
4. It is always better to work to six significant figures rather than two because:
   1. The result is more accurate
   2. The result is more precise
   3. The calculation is easier
   4. It is not true that it is always better to work to more significant figures
5. Write 4.613 x 10--4 out in full
   1. 46130
   2. 46.13
   3. 0.004613
   4. 0.0004613

1. What is 1024 in scientific notation
   1. 210
   2. 2.0 E 10.0
   3. 1.024 × 103
   4. 1024
2. Why does algebra use symbols rather than numbers?
   1. To make calculations more complicated
   2. To efficiently describe general calculations
   3. To allow for changing conditions
   4. To give more accurate answers
3. Are the rules for algebraic calculations
   1. Essentially the same as those for calculations with numbers
   2. Completely different to those for calculations with numbers
   3. Not related to those for calculations with numbers
   4. There are no general rules for algebraic calculations
4. Write down an expression for the amount spent on a meal (S) by a group of x people, when food cost £12 for each person and wine cost £8 a bottle and the group bought one bottle between two of them.
   1. S = 20x
   2. S = 16x
   3. S = 12 + 4x
   4. S = 12x + 4
5. Simplify 4a/b + b – 3b + 6a/b
   1. 8 + a/b + b
   2. 10a/b – 2b
   3. 10a/2b – 2b
   4. 2a – 2b /b
6. Simplify x – 3y – 2x2 + 3x2 + 4y – x
   1. –y + x2
   2. 2x + y + x2
   3. y + x2
   4. –y – x2
7. n(a+b) is equal to:
   1. n+a+b
   2. na + b
   3. na + nb
   4. a + nb
8. 2p + 2q + p + pqr – 2pqr is equal to:
   1. 3p + 2q – pqr
   2. 2(p+q) + pqr
   3. p(3 – 2qr) + 2q
   4. none of these
9. Simplify 4p/[2(p + q)]
   1. 2/q
   2. 2p/(p+q)
   3. 2/(1+q)
   4. 2p/q

|  |  |
| --- | --- |
| Question | Answer |
| 1 | C |
| 2 | A |
| 3 | C |
| 4 | B |
| 5 | D |
| 6 | B |
| 7 | B |
| 8 | A |
| 9 | A |
| 10 | C |
| 11 | A |
| 12 | C |
| 13 | A |
| 14 | C |
| 15 | D |
| 16 | B |
| 17 | C |
| 18 | A |
| 19 | D |
| 20 | D |
| 21 | C |
| 22 | B |
| 23 | A |
| 24 | B |
| 25 | B |
| 26 | C |
| 27 | C |
| 28 | A |
| 29 | B |