

Question 1 Expand $3x(5x - 5)$ $15x^2 - 15x$	Question 2 Expand and simplify $(x - 1)(x - 3)$ $x^2 - 4x + 3$	Question 3 Factorise $45x - 27$ $9(5x - 3)$	Question 4 Factorise fully $3x(2 + 5x)$
Question 5 Find the nth term: 2, 7, 12, 17,... $5n - 3$	Question 6 If the nth term of a sequence is $7n + 6$ what is the 9th term? 69	Question 7 Divide 10500g in the ratio 3 : 11 2250g, 8250g	Question 8 Divide 2100ml in the ratio 5 : 2 1500 ml, 600 ml
Question 9 Work out $3 \div 0.3 =$ 10	Question 10 Work out $1.5 \div 0.3 =$ 5	Question 11 Increase £330 by 15% £379.50	Question 12 Increase £140 by 30% £182
Question 13 Work out $1 \frac{4}{5}$	Question 14 Work out $2 \frac{4}{5}$	Question 15 Work out the value of $2x + 8y$ when $x = 7$ and $y = -4$ -18	Question 16 Work out the value of $6x^2 + y$ when $x = -6$ and $y = 5$ 221
Question 17 The mean of 16, x, 3, 14, 57 is 22. Find x $x = 20$	Question 18 The mean of 4, x, 5, 6, 1 is 5. Find x $x = 9$	Question 19 $x/3 + 10 = x + 2$ $x = 12$	Question 20 $x/3 + 5 = x - 1$ $x = 9$



Question 1 Expand $2x(2x + 5)$ $4x^2 + 10x$	Question 2 Expand and simplify $(x - 2)(x - 2)$ $x^2 - 4x + 4$	Question 3 Factorise $30x - 18$ $6(5x - 3)$	Question 4 Factorise fully $6x(7x^2 + 1)$
Question 5 Find the nth term: 7, 10, 13, 16,... $3n + 4$	Question 6 If the nth term of a sequence is $5n + 1$ what is the 12th term? 61	Question 7 Divide £6400 in the ratio 3 : 5 $£2400, £4000$	Question 8 Divide £12600 in the ratio 7 : 11 $£4900, £7700$
Question 9 Work out $18 \div 0.9 =$ 20	Question 10 Work out $1.8 \div 0.3 =$ 6	Question 11 Decrease £3680 by 15% $£3128$	Question 12 Increase £470 by 30% $£611$
Question 13 Work out $3/5$	Question 14 Work out $6 \frac{3}{4}$	Question 15 Work out the value of $x + y^2$ when $x = 1$ and $y = 3$ 10	Question 16 Work out the value of $3x + 5y$ when $x = -5$ and $y = 5$ 10
Question 17 Find the median 16, 16, 5, 8, 23 16	Question 18 Find the median 19, 25, 7, 11, 11 11	Question 19 $x/2 - 2 = 2x - 11$ $x = 6$	Question 20 $x/2 - 4 = 3x - 24$ $x = 8$



Question 1 Expand $2x(11x + 7)$ $22x^2 + 14x$	Question 2 Expand and simplify $(x + 4)(x + 2)$ $x^2 + 6x + 8$	Question 3 Factorise $27x - 15$ $3(9x - 5)$	Question 4 Factorise fully $10x^2(3 + 2x)$
Question 5 Find the nth term: 4, 7, 10, 13,... $3n + 1$	Question 6 If the nth term of a sequence is $5n - 5$ what is the 5th term? 20	Question 7 Divide £1600 in the ratio 5 : 3 £1000, £600	Question 8 Divide £1575 in the ratio 7 : 2 £1225, £350
Question 9 Work out $6.3 \div 0.7 =$ 9	Question 10 Work out $10.4 \div 0.8 =$ 13	Question 11 Decrease £390 by 10% £351	Question 12 Increase £420 by 65% £693
Question 13 Work out $8 \frac{3}{14}$	Question 14 Work out $2 \frac{2}{3}$	Question 15 Work out the value of $x + y^2$ when $x = 1$ and $y = -2$ 5	Question 16 Work out the value of $4x - 8y$ when $x = -2$ and $y = 2$ -24
Question 17 The mean of 17, x , 10, 17, 51 is 21. Find x $x = 10$	Question 18 Find the median 1.2, 1.2, 1.2, 1.5, 1.6, 0.8 1.2	Question 19 $x/4 + 4 = x - 5$ $x = 12$	Question 20 $x/3 + 4 = x - 6$ $x = 15$



Question 1 Expand $6x(2x - 11)$ $12x^2 - 66x$	Question 2 Expand and simplify $(x + 5)(x - 6)$ $x^2 - x - 30$	Question 3 Factorise $9x + 3$ $3(3x + 1)$	Question 4 Factorise fully $11x(7x^2 + 3)$
Question 5 Find the nth term: 7, 15, 23, 31,... $8n - 1$	Question 6 If the nth term of a sequence is $11n + 6$ what is the 11th term? 127	Question 7 Divide 3300ml in the ratio 3 : 8 900 ml, 2400 ml	Question 8 Divide £450 in the ratio 1 : 2 £150, £300
Question 9 Work out $3.2 \div 0.4 =$ 8	Question 10 Work out $8 \div 0.4 =$ 20	Question 11 Increase £320 by 10% £352	Question 12 Decrease £710 by 50% £355
Question 13 Work out 4 20/21	Question 14 Work out 2/3	Question 15 Work out the value of $x^2 + y$ when $x = 6$ and $y = 3$ 39	Question 16 Work out the value of when $x = 6$ and $y = 6$ $6x - y^2$ 0
Question 17 Find the median 1.8, 1.4, 2.1, 1.9, 1.5, 1.8 1.8	Question 18 The mean of 18, x, 13, 12, 36 is 19. Find x $x = 16$	Question 19 $x/3 + 4 = x - 4$ $x = 12$	Question 20 $x/3 + 3 = x - 7$ $x = 15$



Question 1 Expand $4x(5x - 2)$ $20x^2 - 8x$	Question 2 Expand and simplify $(x - 7)(x - 7)$ $x^2 - 14x + 49$	Question 3 Factorise $32x + 24$ $8(4x + 3)$	Question 4 Factorise fully $5x^3(7 - 3x)$
Question 5 Find the nth term: 16, 27, 38, 49,... $11n + 5$	Question 6 If the nth term of a sequence is $8n$ what is the 8th term? 64	Question 7 Divide £8400 in the ratio 7 : 5 £4900, £3500	Question 8 Divide £24000 in the ratio 3 : 5 £9000, £15000
Question 9 Work out $4.5 \div 0.5 =$ 9	Question 10 Work out $15.3 \div 0.9 =$ 17	Question 11 Increase £460 by 5% £483	Question 12 Increase £530 by 35% £715.50
Question 13 Work out $9/10$	Question 14 Work out $15/28$	Question 15 Work out the value of $x + y^2$ when $x = -5$ and $y = 8$ 59	Question 16 Work out the value of $5x - y^2$ when $x = -6$ and $y = -2$ -34
Question 17 The mean of 3, x, 14, 11, 13 is 10. Find x $x = 9$	Question 18 The mean of 5, x, 10, 6, 12 is 9. Find x $x = 12$	Question 19 $x/4 + 1 = x - 11$ $x = 16$	Question 20 $x/3 - 2 = 2x - 22$ $x = 12$



Question 1 Expand $2x(11 - 5x)$ $22x - 10x^2$	Question 2 Expand and simplify $(x + 4)(x - 4)$ $x^2 - 16$	Question 3 Factorise $14x + 21$ $7(2x + 3)$	Question 4 Factorise fully $10x^3(3 + x)$
Question 5 Find the nth term: 3, 12, 21, 30,... $9n - 6$	Question 6 If the nth term of a sequence is $9n$ what is the 6th term? 54	Question 7 Divide 3250g in the ratio 3 : 2 1950g, 1300g	Question 8 Divide £900 in the ratio 7 : 5 £525, £375
Question 9 Work out $3.6 \div 0.2 =$ 18	Question 10 Work out $20 \div 1 =$ 20	Question 11 Decrease £500 by 10% £450	Question 12 Decrease £4470 by 30% £3129
Question 13 Work out 2	Question 14 Work out $1 \frac{7}{9}$	Question 15 Work out the value of $10 - xy$ when $x = -4$ and $y = 4$ 26	Question 16 Work out the value of $7x - 5y$ when $x = -3$ and $y = 3$ -36
Question 17 Find the median 23, 16, 15, 24, 11 16	Question 18 The mean of 18, x , 11, 3, 27 is 15. Find x $x = 16$	Question 19 $x/4 - 4 = x - 19$ $x = 20$	Question 20 $x/2 + 4 = 3x - 21$ $x = 10$



Question 1 Expand $3x(11x + 2)$ $33x^2 + 6x$	Question 2 Expand and simplify $(x + 4)(x - 7)$ $x^2 - 3x - 28$	Question 3 Factorise $15x + 10$ $5(3x + 2)$	Question 4 Factorise fully $x(x + 5)$
Question 5 Find the nth term: 12, 19, 26, 33,... $7n + 5$	Question 6 If the nth term of a sequence is $2n + 3$ what is the 7th term? 17	Question 7 Divide £4500 in the ratio 3 : 7 £1350, £3150	Question 8 Divide 2475ml in the ratio 3 : 8 675 ml, 1800 ml
Question 9 Work out $3.5 \div 0.7 =$ 5	Question 10 Work out $5.6 \div 0.7 =$ 8	Question 11 Decrease £4810 by 5% £4569.50	Question 12 Decrease £3280 by 75% £820
Question 13 Work out 2	Question 14 Work out $1 \frac{3}{5}$	Question 15 Work out the value of $2x + 3y$ when $x = -5$ and $y = -5$ -25	Question 16 Work out the value of $x^2 + y$ when $x = 7$ and $y = 8$ 57
Question 17 Find the median 22, 15, 12, 19, 18 18	Question 18 Find the median 0.5, 2.1, 1.4, 1.1, 2.4, 1.6 1.5	Question 19 $x/3 - 3 = x - 9$ $x = 9$	Question 20 $x/4 - 2 = x - 8$ $x = 8$

