FA1.1

1) List the factors of 20

2) Work out 25.2 + 7.56

3) Work out -12 + 7

4) Work out 64 × 53
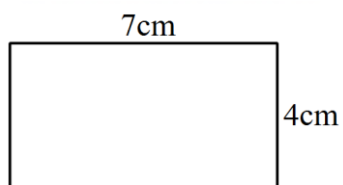
5) Work out 24 × 5.1

FA1.2

1) Work out $7 + 3 \times 2$

2) Simplify $5a - 3b + a + 2b$

3) Solve $5x + 2 = -13$

4) Find the median of 2.1, 8.4, 13.0, 2.5, 9.3

5) Calculate the perimeter of this rectangle

7cm

4cm

FA1.3

1) What is the 4th cube number?

2) Work out 127.6 + 8.73

3) Work out 5 - -12

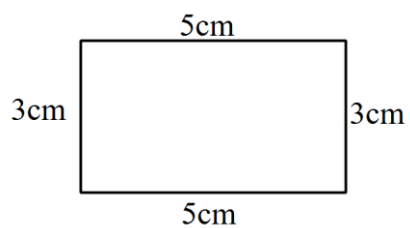4) Work out 41 × 79

5) Work out 13 × 0.3

FA1.4

1) Work out $10 - 4 \div 2$

2) Simplify $5a + 2b - 3b + 2a$

3) Solve $4x - 5 = 1$

4) Find the median of 21, 32, 24, 19

5) Calculate the area of this rectangle

5cm

3cm
3cm

5cm

FA1.5

1) List the factors of 100

2) Work out 4.05 + 368.9

3) Work out -5 - 4
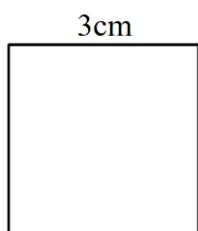
4) Work out 65 × 74

5) Work out 0.6 × 12

1) Work out $12 - 4 + 3$

2) Simplify $12a - 4a + 3a + 2b$

3) Solve $10x - 2 = -7$

4) Find the mean of 21, 32, 24, 19

5) Calculate the area and perimeter of a square with side length 3cm

3cm

FA2.1

1) Expand and simplify $5(5x + 4) - 4(x + 2)$

2) Solve the equation $3(2x + 5) = 39$

3) Work out £585 ÷ 13

4) Express 140 as a product of prime factors

5) Find the nth term of the sequence 5, 14, 23, 32, …

1) Find 35% of 220

2) Complete 230mm ……. 60cm

3) Work out the value of $28 - 2a$ when $a = 5$

4) Work out 0.04×0.7

5) Simplify the ratio 3kg : 800g

1) Expand and simplify $2(2x + 4) + 3(x - 4)$

2) Solve the equation $5(4x + 2) = -70$

3) Work out £282 ÷ 12

4) Express 196 as a product of prime factors

5) Find the nth term of the sequence 20, 34, 48, 62, …

1) Find 90% of 220

2) Complete 1589g ……. 6kg
(<, = or >)

3) Work out the value of $5n - 12$ when $n = 4$

4) Work out 0.05×0.8

5) Simplify the ratio 250 ml: 2 l   (250 millilitres : 2 litres)

FA2.5

1) Expand and simplify $3(2x - 5) - 2(3x - 10)$

2) Solve the equation $3(4x - 2) = 270$

3) Work out £1012 ÷ 22

4) Express 156 as a product of prime factors

5) If the nth term of a sequence is $5n - 7$, what is the 8th term?

1) Find 55% of 420

2) Complete 0.34kg ……. 89g
(<, = or >)

3) Work out the value of $6n - 12$ when $n = 0$

4) Work out 0.03×1.1

5) Simplify the ratio 70 cl: 2 l   (70 centilitres : 2 litres)

FA3.1

1) Solve the equation $3x - 4 = -19$

2) Expand and simplify $2(a - b) + 3(2a + b)$

3) Work out $87 \div 5$

4) Find 25% of £62

5) Divide £40 in the ratio 5:3

FA3.2

1) Work out $5 + 4 \times 3^2$

2) If the nth term of a sequence is $6n - 11$, what is the 10th term?

3) Factorise $20 - 4x$ and factorise fully $6x - 9x^2$

4) Express 1000 as a product of its prime factors

5) How much change from £10 would you get if you spent £3.19 and £1.57?

FA3.3

1) Solve the equation $5x - 7 = 6 + 3x$

2) Expand and simplify $6(2a + b) - 3(a - 2b)$

3) Work out $10 \div 8$

4) Find 95% of £70

5) Divide £121 in the ratio 5 : 6

1) Work out $4 + 3^2 \times 2$

2) If the nth term of a sequence is $20n + 25$, what is the 5th term?

3) Factorise $18x - 27$ and factorise fully $16x^2 - 24x$

4) Express 88 as a product of its prime factors

5) How much change from £10 would you get if you spent £5.65 and £2.75?

1) Solve the equation $2x - 18 = 5x + 3$

2) Expand and simplify $6(5a + 3b) + 4(2a - b)$

3) Work out $27 \div 5$

4) Find 35% of £340

5) Divide £90 in the ratio 3 : 2

1) Work out $(4 + 3^2) \times 2$

2) If the nth term of a sequence is $2.5n + 7$, what is the 4th term?

3) Factorise $21 - 28x$ and factorise fully $15x^2 + 6x^3$

4) Express 240 as a product of its prime factors

5) How much change from £10 would you get if you bought two items costing £2.74 each?

FA4.1

1) Work out $\frac{3}{4} - \frac{2}{3}$

2) Round 953 to 1 significant figure

3) Work out $\frac{2}{3} \div \frac{3}{4}$

4) Factorise fully $20x^2 - 15x$

5) Express 180 as a product of prime factors

1) Work out 306×74

2) Express $\dfrac{7}{20}$ as a percentage

3) What is the 5$^{\text{th}}$ square number?

4) Find 15% of £240

5) Calculate the circumference of a circle with radius 5cm.
    Leave your answer in terms of π

1) Work out $\frac{5}{6} - \frac{1}{4}$

2) Round 0.3456 to 1 significant figure

3) Work out $\frac{1}{2} \times \frac{4}{7}$

4) Factorise $27 - 45x$

5) Find the highest common factor of 30 and 42

1) Work out 57×360

2) Express 0.4 as a percentage

3) What is the 5th prime number?

4) Find 35% of £180

5) Calculate the area of a circle with diameter 6cm.
Leave your answer in terms of π

1) Work out $\frac{5}{6} + \frac{3}{8}$

2) Round 94.38 to 1 significant figure

3) Work out $\frac{3}{8} \div \frac{1}{4}$

4) Factorise fully $12x + 18x^2$

5) Find the lowest common multiple of 10 and 8

1) Work out 64×64

2) Express $\frac{9}{40}$ as a percentage

3) What is the 13th square number?

4) Find 75% of £320

5) Calculate the circumference of a circle with radius 8m.
   Leave your answer in terms of π

FA5.1

1) Work out $\frac{5}{6} - \frac{3}{4}$

2) By rounding each number to one significant figure, estimate $\frac{7.6-2.836}{0.5386}$

3) Increase £540 by 15%

4) Find the nth term of this sequence 0, -4, -8, -12, …

5) Solve the equation $10x + 7 = -7$

FA5.2

1) Work out the value of $2x^2$ when $x = 5$

2) Expand and simplify $5(4a - b) - 2(a + 7b)$

3) Work out $61 \times 0 \cdot 33$

4) Work out $20 - 5 + 3 \times 2$

5) Work out $\frac{4}{7}$ of 252

1) Work out $\frac{3}{8} + \frac{5}{6}$

2) By rounding each number to one significant figure, estimate $\frac{583 \times 309.7}{273.6}$

3) Decrease £1240 by 5%

4) Find the nth term of this sequence 11, 18, 25, 32, …

5) Solve the equation $3x - 5 = 5x + 3$

FA5.4

1) Work out the value of $2x^2$ when $x = -5$

2) Expand and simplify $3(2b - 3a) + 5(2a + b)$

3) Work out $531 \div 0.3$

4) Work out $20 + 5 - 3 \times 2$

5) Work out $\frac{7}{5}$ of 245

1) Work out $\frac{4}{5} \div \frac{2}{9}$

2) By rounding each number to one significant figure, estimate $\frac{623 \times 767.34}{282.1 + 142}$

3) Increase £4620 by 15%

4) Find the nth term of this sequence 76, 88, 100, 112, …

5) Solve the equation $7x - 4 = 5x - 3$

1) Work out the value of $2x^2 + 3x$ when $x = 5$

2) Expand and simplify $4(b + 3a) - 3(3a - b)$

3) Work out $3435 \div 0.05$

4) Work out $2 \times 5^2 - 20 \div 2$

5) Work out $\frac{5}{6}$ of 642

FA6.1

1) Solve $4x + 9 \leq 1$ and display the solution on a number line

2) Work out $72 \div 0.3$

3) Express $\dfrac{6}{25}$ as a percentage

4) Factorise fully $32x - 12x^2$

5) Make x the subject of $y = ax - b$

1) Express 120 as a product of primes

2) Decrease £360 by 15%

3) Work out three sevenths of 392

4) Estimate, by rounding each number to one significant figure,

$$\frac{36.4 \times 11.3}{2.173}$$

5) Work out the value of $12 + 4x^2$ when $x = -3$

FA6.3

1) Solve $3x - 8 \leq 4$ and display the solution on a number line

2) Work out $24.64 \div 0.7$

3) Express 15% as a fraction in its lowest terms

4) Factorise fully $12x^3 + 18x$

5) Make x the subject of $y = a(x - b)$

1) Express 324 as a product of primes,
   and hence find its square root

2) Increase £120 by 35%

3) Work out five twelfths of 4140

4) Estimate, by rounding each number to one significant figure,

$$\frac{2036.4 \times 38.3}{23.73}$$

5) Work out the value of $20 - 3x^2$ when $x = -2$

1) Solve $10x - 8 > 6$ and display the solution on a number line

2) Work out $2.632 \div 0.07$

3) Express $\frac{1}{3}$ as a percentage

4) Factorise fully $18x^3 - 24x^2$

5) Make x the subject of $y = a\sqrt{x} + b$

1) Express 196 as a product of primes, and hence find its square root

2) Decrease £90 by 15%

3) Work out four fifths of 4140

4) Estimate, by rounding each number to one significant figure,

$$\frac{306.4 \times 58.3}{92.76}$$

5) Work out the value of $10x - 3x$ when $x = -3$