81_1

1) Work out £44.62 + £27.62

2) Evaluate 2^5

3) Solve $5x - 12 = 18$

4) Round 5640 to one significant figure

5) Work out $3 - 10$

81.2

1) Find the nth term: 6, 10, 14, 18, …

2) Simplify the ratio 12 : 20

3) Work out 6 × £42.32

4) Calculate the mean of 12, 5, 16, 13, 9

5) Complete the equivalent fraction $\frac{4}{5} = \frac{12}{?}$

81_3

1) Work out £53.40 - £16.60

2) Evaluate 3^3

3) Solve $3x + 12 = -3$

4) Round 349 to one significant figure

5) Work out $-3 - 15$

81.4

1) Find the nth term: -2, 3, 8, 13, …

2) Simplify the ratio 210 : 60

3) Work out 3 × £25.71

4) Calculate the median of 5, 8, 2, 9, 9

5) Complete the equivalent fraction $\frac{5}{9} = \frac{?}{36}$

81_5

1) Work out £75.80 - £6.35

2) Evaluate 5^3

3) Solve $5x + 7 = 72$

4) Round 8099 to one significant figure

5) Work out -4-⁻12

81.6

1) Find the n^{th} term: 107, 113, 119, 125, …

2) Simplify the ratio 66 : 90

3) Work out 8 × £7.29

4) Calculate the median of 23, 9, 31, 33, 24, 20

5) Complete the equivalent fraction $\frac{8}{7} = \frac{56}{?}$

82.1

1) Estimate 412 x 28

2) Work out $\frac{3}{7} \times \frac{4}{5}$

3) Work out £289.80 ÷ 6

4) Expand $3x(2x - 5)$

5) Express 280 as a product of prime factors

82.2

1) Find the highest common factor of 24 and 42

2) Work out 48 ÷ -4

3) Complete the ratio 6 : 30 = 1 : ?

4) Solve the equation $5x + 3 = 3x + 12$

5) Express 34% as a fraction in its lowest form

82.3

1) Estimate 4734 - 4153

2) Work out $\frac{2}{3} \times \frac{6}{7}$

3) Work out £634 ÷ 5

4) Expand $5x(3 - 2x)$

5) Express 64 as a product of prime factors

82.4

1) Find the lowest common multiple of 24 and 72

2) Work out -6 × -4

3) Complete the ratio 16 : 128 = 1 : ?

4) Solve the equation $6x - 5 = 3x + 16$

5) Express 56% as a fraction in its lowest form

82.5

1) Estimate 6087 ÷ 18.7

2) Work out $\frac{5}{8} \times \frac{12}{13}$

3) Work out £289 ÷ 4

4) Expand $x(3x + 14)$

5) Express 90 as a product of prime factors

82.6

1) Find the Highest common factor of 120 and 135

2) Work out -6 ÷ -4

3) Complete the ratio 22 : 330 = 1 : ?

4) Solve the equation $9x + 7 = 3x - 5$

5) Express 12.5% as a fraction in its lowest form

83.1

1) Factorise $14x - 21$

2) Simplify $a^3 \times a \times b^2 \times a$

3) Work out 74.8 – 6.23

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

5) Find the nth term: 21, 23, 25, 27, …

83.2

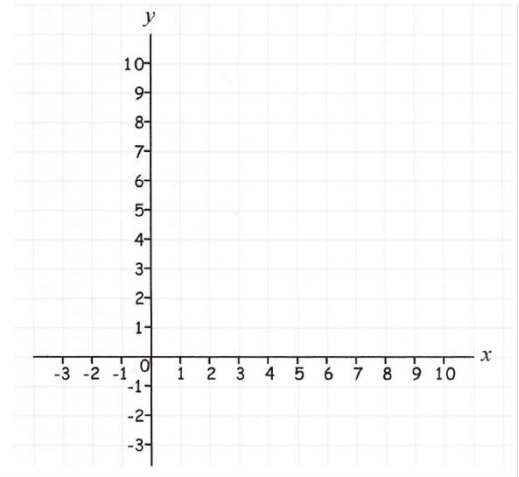
1) Work out 12 ÷ 0.3

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

3) Divide £40 in the ratio 2 : 3

4) Express $\frac{13}{25}$ as a percentage

5) Find the gradient of the line $y = 2x - 3$



83.3

1) Factorise $12 - 20x$

2) Simplify $a^3 \times b \times c^2 \times a^2 \times c$

3) Work out $927.2 \div 4$

4) Work out $\frac{7}{12} - \frac{3}{8}$

5) Find the nth term: 1, 16, 31, 46, …

83.4

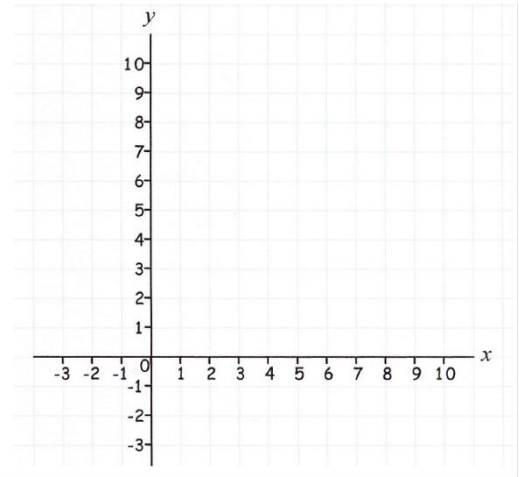
1) Work out 480 ÷ 1.2

2) Solve the equation $3(2x + 3) = 9$

3) Divide £64 in the ratio 5 : 3

4) Express $\frac{3}{20}$ as a percentage

5) Find the gradient of the line $y = -3x + 9$



83.5

1) Factorise $28a - 12$

2) Simplify $b^3 \times a \times b \times a \times b^5$

3) Work out 6.4×3.7

4) Work out $\frac{5}{9} - \frac{2}{3}$

5) Find the n^{th} term: 13, 10, 7, 4, …

83.6

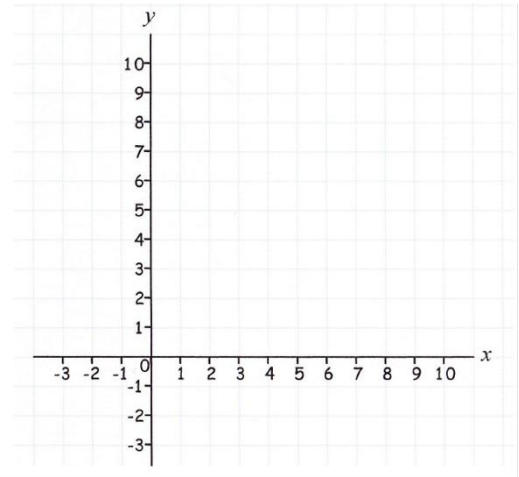
1) Work out 4.28 ÷ 0.2

2) Solve the equation $5(4 + 2x) = 49$

3) Divide £35 in the ratio 7 : 3

4) Express $\frac{108}{200}$ as a percentage

5) Find the gradient of the line $y = -x + 9$



84.1

1) Find 35% of £140

2) Factorise $20 - 16x$

3) Solve $5(3x - 4) = 130$

4) Express 90 as a product of primes

5) Calculate the mean of 11, 6, 9, 14, 55

84.2

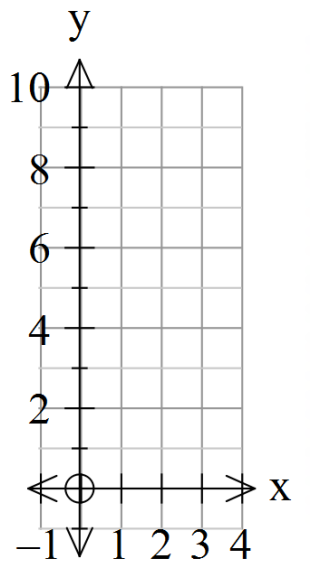
1) Work out $2 + 3 \times 4$

2) Work out $24 \div 0.3$

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

4) Express 8% as a fraction in its lowest form

5) Where does the line $y = 2x + 3$ cross the y-axis?



84.3

1) Find 25% of £140

2) Factorise $24x - 18$

3) Solve $5 + 2x = -10$

4) Express 630 as a product of primes

5) Calculate the median of 0.8, 0.3, 1.2, 0.7, 0.1, 3.1

84.4

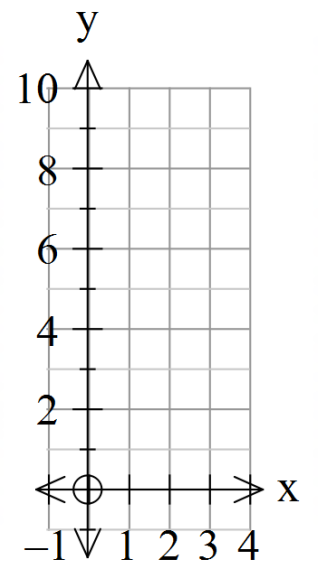
1) Work out $5 + 10 \times 3^2$

2) Work out $28 \div 0.4$

3) Make x the subject of $y = x^2 + b$

4) Express $\frac{7}{20}$ as a percentage

5) Where does the line $y = 3x + 1$ cross the y-axis?



84.5

1) Find 95% of £140

2) Factorise $40 + 32x$

3) Solve $2(3x + 4) = 11$

4) Express 324 as a product of primes, and hence show that it's a square number

5) Calculate the mean of 6, 3, 8, 3, 6

84.6

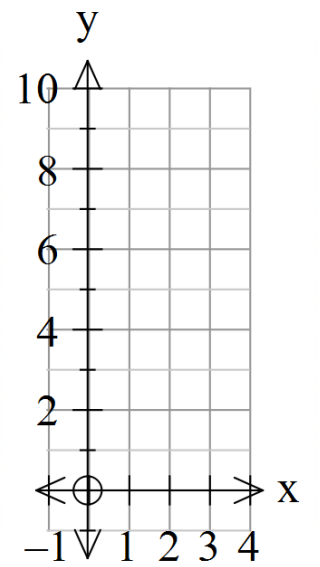
1) Work out $25 - 10 + 3^2$

2) Work out $6.24 \div 0.3$

3) Make x the subject of $y = \sqrt{x - b}$

4) Express $\frac{3}{8}$ as a percentage

5) Where does the line $y = -3x + 7$ cross the y-axis?



85.1

1) Work out $10 - 1.6 \times 0.7$

2) Complete the ratio 3 : ? = 1 : 9

3) Solve $4x - 6 = 7 + 2x$

4) Does the point (7 , 6) lie on the line $y = 2x - 5$

5) Find the n^{th} term of the sequence 23, 19, 15, 11, …

85.2

1) Find the gradient and y-intercept of the line

$2y = 6x + 5$

2) Express 21 out of 40 as a percentage

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

4) Round 3447 to one significant figure

5) Find 3% of £27

85.3

1) Work out $1.8 + 1.7 \times 1.6$

2) Complete the ratio 3 : 8 = 24 : ?

3) Solve $4x + 5 = 2x - 7$

4) Does the point (2 , 4) lie on the line $y = 3x - 2$

5) Find the n^{th} term of the sequence 25, 29, 33, 37, …

85.4

1) Find the gradient and y-intercept of the line

$x + y = 5$

2) Express 34 out of 400 as a percentage

3) Work out $3\frac{1}{4} \div 2\frac{3}{5}$

4) Round 0.0362 to one significant figure

5) Find 7% of £12

85.5

1) Work out $1.6 - 0.5 \times 1.2$

2) Complete the ratio 5 : 4 = ? : 24

3) Solve $3x - 4 = 16 - 2x$

4) Does the point (6 , 2) lie on the line $y = 2x + 2$

5) Find the n^{th} term of the sequence -3, -7, -11, -15, …

85.6

1) Find the gradient and y-intercept of the line

$2y - 6x = 8$

2) Express 34 out of 40 as a percentage

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

4) Round 448.67 to one significant figure

5) Find 2% of £148

86.1

1) Work out $2\frac{3}{5} \div 2\frac{1}{2}$

2) Simplify $18x^4 \div 3x$

3) Find the gradient and y-intercept of the line $y - 2x = 3$

4) Solve $\frac{2x+2}{3} = 4$

5) Factorise fully $14x - 42x^2$

86.2

1) What is the 30th term of the following sequence

   7, 10, 13, 16, …

2) Round 210.067 correct to 1 decimal place

3) Work out $4922 \div 23$

4) Decrease £230 by 15%

5) By rounding each number to one significant figure, estimate

$$\frac{7.93 \times 6.4}{3.82}$$

86.3

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

2) Simplify $4x^3 \times 3x^2$

3) Find the gradient and y-intercept of the line $y - 3x = 7$

4) Solve $\frac{3x}{10} + 3 = 7$

5) Factorise fully $4x^3 - 60x^2$

86.4

1) What is the 40^{th} term of the following sequence

   3, 8, 13, 18, …

2) Round 12.961 correct to 1 decimal place

3) Work out $3510 \div 15$

4) Increase £320 by 35%

5) By rounding each number to one significant figure, estimate

$$\frac{81.6 \times 1.892}{16.5}$$

86.5

1) Work out $5\frac{3}{8} + 3\frac{3}{4}$

2) Simplify $4x^5 \div 8x^2$

3) Find the gradient and y-intercept of the line $2y = 8x - 3$

4) Solve $\frac{2x+6}{5} = 3$

5) Factorise fully $6x + 15x^3$

86.6

1) What is the 100th term of the following sequence

   8, 5, 2, -1, -4, …

2) Round 123.4567 correct to 2 decimal places

3) Work out $336 \div 24$

4) Increase £280 by 90%

5) By rounding each number to one significant figure, estimate

$$\frac{6407}{5.93 \times 53.8}$$