M1.

(a) Yes, gives correct answer as inverse operations and order does not matter

oe

B1

(b) No, does not work, inverse operations not in correct order

oe

B1

[2]

M2.(a) 10 (ice creams) and 7 (lollies) chosen

B1

their 10 × 1.2(0) or 12(.00)

or their 10 × 120 or 1200

and

their 7 × 0.8(0) or 5.6(0)

or their 7 × 80 or 560

17.6 or 1760 or £17.60p implies B1 M1

M1

17.60

Strand (i)

ft correct answer with correct money notation for their 10 and their 7

SC2 16.40

SC1 16.4 or 12 or 5.60

Q1ft

(b) 10 + 7 + 15 + 18 or 50

Allow 1 error

M1

80 − their 50 or 30

Bars that total 30 or 80 − their 50

M1dep

Bars for 14 ice creams and 16 lollies

SC1 Bars with two more lollies than ice creams with no M marks awarded

A1

[6]

M3.(a) 15 and 10 in either order

B1 15 with a number less than or equal to 15

or

two numbers with a total of 25

B2

(b) 17 and 11 in either order

B1 two numbers giving a range of 6 for set C

or

two numbers with a total of 28

B2

[4]

M4.(a) Yes she's asking people who own dogs so they prefer them

oe

Yes she should ask people who don't own dogs / pets

B1

(b) No preference = 6

B1

Cats = Dogs × 2

B1

Dogs + Cats + No preference = 30
8, 16, 6 scores B3

B1

[4]

M5. 5(.00) − 2.6(0) or 2.4(0) or 240
May be implied

M1

their 240 ÷ 80

or

builds up to their 240 eg 80 + 80 + 80 or 3 × 80
oe

M1

3
Must see correct method
SC2 Answer only of 3

A1

Alternative method

2.60 + 80

or

5(.00) − 80

M1

2.60 + 80 + 80 + 80

or

5(.00) − 80 − 80 − 80

M1

3

Must see correct method
SC2 Answer only of 3

A1

[3]

M6.

4 ÷ 4 + 4 ÷ 4
or
4 × 4 ÷ (4 + 4)
or
(-4 − 4) ÷ 4 + 4
or
4 ÷ ((4 + 4) ÷ 4)
or
(4 ÷ (4 + 4)) × 4

Any correct calculation

B1

(4 + 4 + 4) ÷ 4
or
(4 × 4 − 4) ÷ 4

Any correct calculation

B1

[2]

M7.

Any three of
1 + 2 + 3 + 4 = 10
1 × 2 × 3 + 4 = 10
1 + 2 + 3 × 4 = 15
1 + 2 × 3 × 4 = 25

B1 for each

B3

[3]

M8.3 10p coins

2 20p coins

5 50p coins

B2 any 10 coins totalling £3.20
eg 6 × 20p, 4 × 50p
eg 4 × 5p, 6 × 50p
or any combination of 50p, 20p and 10p coins totalling £3.20
eg 2 × 10p, 5 × 20p, 4 × 50p
or 30p, 40p and £2.50 on answer lines without correct number of coins seen

B1 any number of coins totalling £3.20
eg 2 × 5p, 1 × 10p, 6 × 50p
eg 1 × 10p, 3 × 20p, 5 × 50p
or 10 coins using any combination of 50p, 20p and 10p coins totalling
£3.00 or £3.10 or £3.30 or £3.40
eg 2 × 10p, 3 × 20p, 5 × 50p

B3

Additional Guidance

10 coins using combination of 10p, 20p and 50p coins totalling £3.00, £3.10, £3.30 or £3.40

1 10p 2 10p 4 10p 1 10p 2 10p B1

2 20p 3 20p 1 20p 5 20p 4 20p

5 50p 5 50p 5 50p 4 50p 4 50p

[3]

M9.5 × 24 or 120

M1

204 − their 120 or 84

M1dep

21

A1

Additional Guidance

(204 − 24) and 180 ÷ 4 = 45 is M0

[3]

M10.(a) 2700 × 8 or 21 600

or 2700 × 0.08

or 216

oe

M1

5850 − 2700

or 3150

oe

M1

(5850 − 2700) × 5

or their 3150 × 5

or 15750

(5850 − 2700) × 0.05

or their 3150 × 0.05

or 157.5

or digits 3735

dependent on 2nd M1

M1dep

373.50

373.5 implies M3 Q0

Q1

Additional Guidance

373.50p is M1 M1 M1 Q0

(b) 7 (%)

B1

[5]

M11.(a) (£) 3.74

B1

Additional Guidance

£3.74p

B1

3.74p

B1

374p with £ sign crossed out

B1

374p without £ sign crossed out

B0

(b) 1.99 + 1.7 + 0.55 or 4.24
oe
Allow one error

M1

5 – their 4.24 or 0.76
oe

M1dep

76
£0.76

A1

Additional Guidance

Allow a mixture of units for the M marks

76p seen in working, 0.76 on answer line

M1M1A1

[4]

M12.

(a) (17 + 3) ÷ 4

20 ÷ 4

M1

5

SC1 17.75

A1

(b) 18, 19, 20

B2 All 3 correct answers with extra incorrect answers
or any 2 correct answers with or without
extra incorrect answers
B1 1 correct answer with or without extra incorrect answers
or any correct reverse trial starting with a number between 5 and 6

B3

[5]

M13. 100 − (27 + 41) *oe*

M1

32

A1

Correct minimum numbers for their 32

ft from their 32
B1 buys beads to make each number of each colour equal

R = 14, *B* = 0, *G* = 9 scores 4 marks

or two correct minimum numbers for their 32

SC2 R = 14 and B = 0

SC1 R = 14

B2ft

[4]

M14.

(a) 1 + 2 × 4 or 1 + 4 × 2 or 4 + 1 × 5 or 4 + 5 × 1 or 5 + 4 × 1 or 5 + 1 × 4

B1

(b) 4 × 3 − 1 × 5 or 4 × 3 − 5 × 1

or 5 × 3 − 2 × 4 or 5 × 3 − 4 × 2

3 is placed in question so other answers are irrelevant

B1 for any correct expression i.e. not using given numbers or repetition or correct expression but with '3' moved from position.

e.g. 3 × 5 − 1 × 8

3 × 3 − 1 × 2

Negative answer B0

B2

(c) 3 + 4 + 5 = 12

B1 for any correct expression using 'incorrect' digits e.g. 0 or repeating digits

e.g. 1 + 4 + 5 = 10

B2

[5]

M15. 3 × 10^2 or 100 seen

M1

300

SC1 900

A1

[2]