M1.

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

В1

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

В1

[2]

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

В1

their 10 × 1.2(0) or 12(.00)

or their 10 × 120 or 1200

and

their $7 \times 0.8(0)$ or 5.6(0)

or their 7 × 80 or 560

17.6 or 1760 or £17.60p implies B1 M1

М1

17.60

Strand (i)

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

662.46.4

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 Α1 **M3.**(a) 15 and 10 in either order B1 15 with a number less than or equal to 15 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 two numbers with a total of 28 **B2** Yes she's asking people who own dogs so they prefer them **M4.**(a) Yes she should ask people who don't own dogs / pets **B1** (b) No preference = 6 В1 Cats = Dogs \times 2 В1

[6]

[4]

. .

[4]

В1

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

М1

their 240 ÷ 80

or

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

М1

3

Must see correct method SC2 Answer only of 3

A1

Alternative method

2.60 + 80

or

5(.00) - 80

М1

2.60 + 80 + 80 + 80

or

5(.00) - 80 - 80 - 80

М1

3

Must see correct method SC2 Answer only of 3

Α1

[3]

M6.

$$4 \div 4 + 4 \div 4$$

or
 $4 \times 4 \div (4 + 4)$
or
 $(-4 - 4) \div 4 + 4$
or
 $4 \div ((4 + 4) \div 4)$
or
 $(4 \div (4 + 4)) \times 4$

Any correct calculation

В1

$$(4 + 4 + 4) \div 4$$

or
 $(4 \times 4 - 4) \div 4$

Any correct calculation

В1

[2]

M7.

B1 for each

В3

[3]

M8.3 10p coins

2 20p coins

5 50p coins

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

ВЗ

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

М1

204 - their 120 or 84

M1dep

21

A1

Additional Guidance

(204 - 24) and $180 \div 4 = 45$ is M0

[3]

M10.(a) 2700 × 8 or 21 600

or 2700 × 0.08

or 216

oe

М1

5850 - 2700

or 3150

oe

М1

 $(5850 - 2700) \times 5$

or their 3150 × 5

or 15750

 $(5850 - 2700) \times 0.05$

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 (%) В1 **M11.**(a) (£) 3.74 В1 **Additional Guidance** £3.74p В1 3.74p В1 374p with £ sign crossed out В1 374p without £ sign crossed out В0 1.99 + 1.7 + 0.55 or 4.24 (b) oe Allow one error М1 5 - their 4.24 or 0.76 oe M1dep 76 £0.76

[5]

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) $(17 + 3) \div 4$

20 ÷ 4

М1

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*

М1

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)
$$1+2\times4$$
 or $1+4\times2$ or $4+1\times5$ or $4+5\times1$ or $5+4\times1$ or $5+1\times4$

В1

(b)
$$4 \times 3 - 1 \times 5 \text{ or } 4 \times 3 - 5 \times 1$$

or
$$5 \times 3 - 2 \times 4$$
 or $5 \times 3 - 4 \times 2$

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.

 $3 \times 3 - 1 \times 2$

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 × 102 or 100 seen

М1

300

SC1 900

A1

[2]