ANSWER SHEET

Arithmetic Quiz answers

Mild:

Question number	Question	Answer	Marks
1	$\square = 8 - 6$	2	1
2	$15 + 3 = \square$	18	1
3	$\square \times 3 = 9$	3	1
4	$5 + 8 + 5 = \square$	18	1
5	$\square + 23 = 67$	44	1
6	$416 + 7 = \square$	423	1
7	$\square = \frac{1}{2}$ of 16	8	1
8	$470 - \square = 20$	450	1
9	$10 \div \square = 5$	2	1
10	$23 + 9 = \square$	32	1
11	$\square = 6 \times 3$	18	1
12	$\square - 24 = 34$	58	1
13	$43 + 29 = \square$	72	1
14	$51 - 23 = \square$	28	1
15	$\frac{3}{4}$ of 12 $= \square$	9	1

Medium and Spicy:

Question number	Question	Answer	Marks
1	$5 \div 1 = \square$	5	1
2	$\frac{1}{3}$ of 18 $= \square$	6	1
3	$\square = 120 \times 0$	0	1
4	$68 \times 1 = \square$	68	1
5	$\frac{3}{10} + \frac{6}{10} = \square$	$\frac{9}{10}$	1
6	$6 \times 3 = \square$	18	1
7	$\square = 70 \times 2$	140	1
8	$8 \times 9 = \square$	72	1
9	$242 = 542 - \square$	300	1
10	$450 \div 9 = \square$	50	1
11	$61 - 46 = \square$	15	1
12	$\square = 30 \div 6$	5	1
13	$576 + 267 = \square$	843	1
14	$6 \times 7 \times 5 = \square$	210	1
15	$45 + 76 = \square$	121	1
16	$652 - \square = 355$	297	1
17	$\square + 46 = 94$	48	1
18	$24 \times 8 = \square$	192	1
19	$90 \div 6 = \square$	15	1
20	$3752 + 2654 = \square$	6406	1
21	$95 \div \square = 5$	19	1
22	$6742 - 3855 = \square$	2887	1
	Total marks		**22**

Monday – Making amounts of money

Starter:

A. 7 x 8 = 56	B. 658 + 287 = 955
C. 528 ÷ 8 = 66	D. 34 + 45 = 79

Mild

1 How much money is there?

38 p

£ 38

What is the same and what is different?

2

a) Complete the statements.

There is 4 pounds.

There is 75 pence.

There is £ 4 and 75 p.

There is £ 4.75

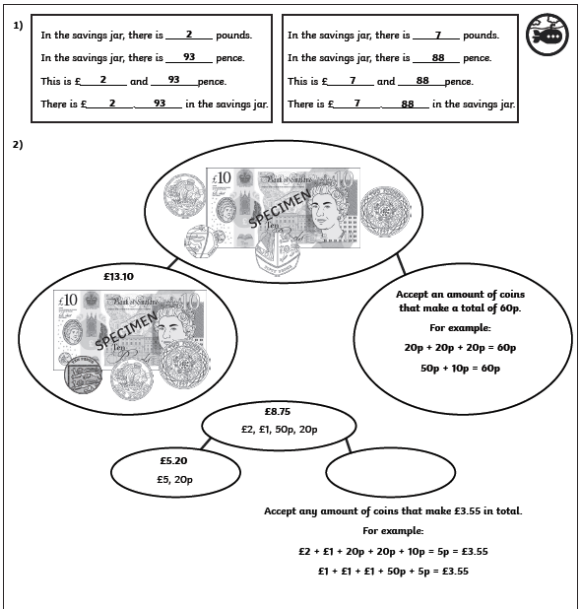
b) Draw money so that there are fewer coins but the same total amount.

e.g. £2 £2 50p 20p 5p

Developing

1a. £2.95, £1.50
2a. £1.52, £1.12
3a. £1.55
4a. A
5a. £1, £2, 90p

Medium



3) b) 2 pounds and 5 pence = £2.05

c) 0 pounds and 65 pence = £0.65

d) 2 pounds and 50 pence = £2.50

6a. £2.55, 661, £8.23
7a. 185p and £1.85, 172p and £1.72
8a. £2.30
9a. C
10a. 10p, 6p, £10

Spicy:

1) Ben can afford the book because he has exactly £2.50 but Tom doesn't have enough money. He only has £2.45 so needs 5p more to buy the book.

2)

Pence	Using £ Sign	✓ or x ?	Error/Correct Answer
1308p	£13.08	✓	
550p	£5.5	x	There needs to be two digits after the decimal point. £5.50 is the correct answer.
1407p	£140.7	x	The decimal point has been put in the wrong place. £14.07 is the correct answer.
780p	£7.80	✓	

3)

£1, 50p, 10p, 10p, ?p	Mo could have this set of coins as they total £1.70 and the missing coin is a 5p.
50p, 50p, 50p, 10p, ?p	Mo cannot have this set of coins as they total £1.60 so the missing amount is 15p, which cannot be made with 1 coin.
£1, 50p, 20p, 2p, ?p	Mo cannot have this set of coins as they total £1.72 so the missing amount is 3p, which cannot be made with 1 coin.
50p, 50p, 50p, 20p, 5p	Mo could have this set of coins as they total £1.70 and the missing coin is a 5p.

1) a) Two of any of the following:

£1, 2p, 2p, 2p, 2p, 1p

£1, 5p, 1p, 1p, 1p, 1p

50p, 50p, 5p, 2p, 1p, 1p

b) £1, 20p, 10p, 2p, 2p, 1p

£1, 10p, 10p, 5p, 5p, 5p

50p, 50p, 10p, 10p, 10p, 5p

50p, 50p, 20p, 5p, 5p, 5p

50p, 20p, 20p, 20p, 20p, 5p

2) Different examples possible.

a) Always.

If Tanya had the four smallest coins, the total would be 5p + 5p + 2p + 1p = 13p. This is more than 13p so she would always have more than 12p.

b) Sometimes.

If Tanya had £2 + 20p + 20p + 5p, this makes a total of £2.45 which is greater than 50p.

If she had 10p + 10p + 5p + 5p, this makes a total of 30p which is less than 50p so the statement is sometimes true.

c) Never.

If you add together the 4 greatest value coins that Tanya has, this would be less than £7.

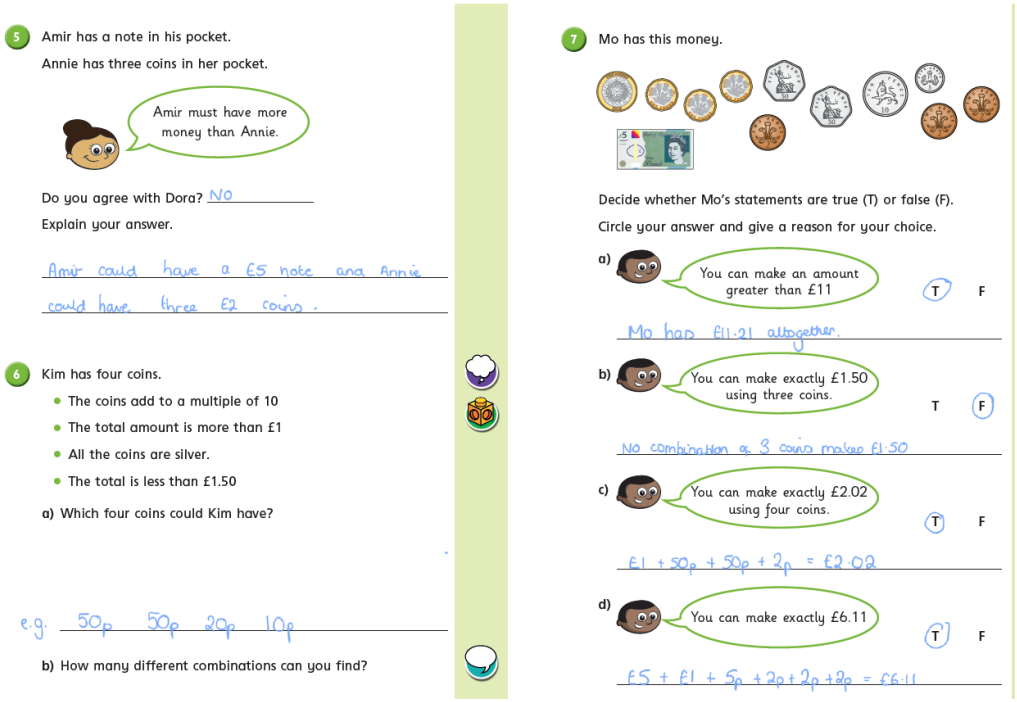
£2 + £2 + £1 + 50p makes a total of £5.50 so the statement is never true.

d) Sometimes.

If Tanya had £2 + £2 + 50p + 20p, this makes a total of £4.70 which is greater than £4 so the statement is not true.

However, if Tanya had £1 + 50 + 50p + 1p this makes a total of £2.01 which is between £1 and £4 so the statement is true.

Overall, the statement is sometimes true.



5 Amir has a note in his pocket.
Annie has three coins in her pocket.

Amir must have more money than Annie.

Do you agree with Dora? NO

Explain your answer.

Amir could have a £5 note and Annie could have three £2 coins.

6 Kim has four coins.

- The coins add to a multiple of 10
- The total amount is more than £1
- All the coins are silver.
- The total is less than £1.50

a) Which four coins could Kim have?

e.g. 50p 50p 20p 10p

b) How many different combinations can you find?

7 Mo has this money.

Decide whether Mo's statements are true (T) or false (F).

Circle your answer and give a reason for your choice.

a) You can make an amount greater than £11 (T) F

Mo has £11.21 altogether.

b) You can make exactly £1.50 using three coins. T (F)

No combination of 3 coins makes £1.50

c) You can make exactly £2.02 using four coins. (T) F

£1 + 50p + 50p + 2p = £2.02

d) You can make exactly £6.11 (T) F

£5 + £1 + 5p + 2p + 2p + 2p = £6.11

Challenge:

1. A,B and C
2. £6.07
3. £3.57

Tuesday - Compare and order amounts of money

Starter:

A. 80 x 50 = 4000	B. 478 + 345 = 823
C. 23 + 33 = 56	D. 543 x 100 = 54 300

Mild:

1a. £1.72, £5.98, £6.53, £8.52
2a. £4.29
3a. >, <, <, =
4a. False, >

1 What is the value of the digit 2 in these amounts?

a) 524p 20p

b) £24 and 50p £20

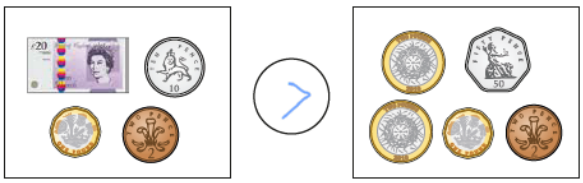
c) £54.02 2p

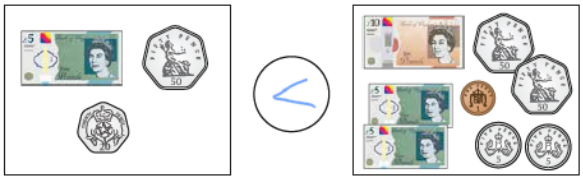
d) 5,240p £2

e) £42.54 £2

f) 2,544p £20

2 Write <, > or = to compare each pair of amounts.

a)  >

b)  <

1) a) <

b) =

c) <

2) a) =

b) >

c) <

Medium:

5a. 1,489p, 2,567p, 3,501p, 5,328p

6a. 1,610

7a. >, <, =, <

8a. False, <

3) a) 710p, 701p, 107p, 71p

b) £16.72, £16.27, £12.76, £12.67

c) £23.03, 2300p, 2030p, £20.03

4) a) £13.68, 1638p, £16.83, 1836p

b) 509p, £5.90, 905p, £50.09

c) 17p, £1.70, 717p, £17

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1) a) False because < should have been used.

b) False because = should have been used.

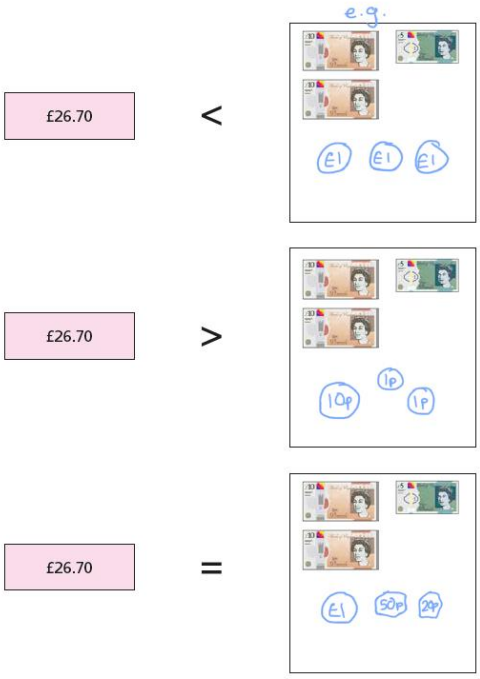
c) False because > should have been used.

d) True

2) 407p should come before £4.17, as £4.17 is equal to 417p.

£0.74	407p	£4.17	£7.04	740p

3 Draw three coins in each box to make the statements correct.



Spicy:

4) a) £13.68, 1638p, £16.83, 1836p
b) 509p, £5.90, 905p, £50.09
c) 17p, £1.70, 717p, £17

1) a) False because < should have been used.
b) False because = should have been used.
c) False because > should have been used.
d) True
2) 407p should come before £4.17, as £4.17 is equal to 417p.

£0.74	407p	£4.17	£7.04	740p

3) Various answers from £6.91 to £7.08.

1) a) 60p or £0.60
b) £6 or 600p
c) £6, £5.50. £5.10, £1.50, £1.10, 60p
2) There are 12 possible values:
£5.13, £5.17, £5.31, £5.37, £5.71, £5.73, £7.13, £7.15, £7.31, £7.35, £7.51, £7.53

4 Write <, > or = to compare the amounts.

a) 743p > 734p
b) £37.40 > £37.04
c) £3.74 < 734p
d) £40.07 > 4,003p
e) 4,037p = £40.37
f) 7,304p < £73.40

5 a) Write the amounts in ascending order.

270p 2,007p 2,700p 720p 7,020p

270p 720p 2,007p 2,700p 7,020p

b) Write the amounts in descending order.

£4.65 £46.50 £6.45 £45.60 £46.05

£46.50 £46.05 £45.60 £6.45 £4.65

c) Write the amounts in ascending order.

£21.89 1,289p 8,291p £82.19 9,128p

1,289p £21.89 £82.19 8,291p 9,128p

d) Write the amounts in descending order.

£5.05 550p 5,500p £50.50 £55.05

£55.05 5,500p £50.50 550p £5.05

6 Huan has three different silver coins in his hand.
What amounts could he have?
Write them in ascending order.

35p 65p 75p 80p

7 Teddy has £6.55 and Annie has 673p.
Dexter has more money than Teddy, but less than Annie.

a) How much money could Dexter have? e.g. £ 6.71
b) What different amounts can you find?

8 What could the missing amount of money be?

e.g. 369p < £ 1 3 . 9 6 < £16.63

Use the digit cards to complete the inequality.

1 3 6 9 0

Use each digit card once only.
You do not need to use every card.
Compare answers with a partner. How many different answers can you find?

Challenge:

1. D
2. B
3. D

Wednesday: Estimating Money

Starter:

A. 64 = 8 x 8	B. 70 + 40 = 110
C. 743 – 636 = 107	D. 756 x 10 = 7560

Mild:

1 a) Complete the number line.

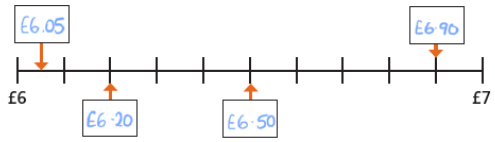
b) Circle the amounts that round to £3

c) What do you notice about the amounts that round to £2 and the amounts that round to £3?

2 Here are some amounts of money.

£6.90	£6.20	£6.50	£6.05

a) Use the amounts to label the number line.



b) Sort the amounts into the table.

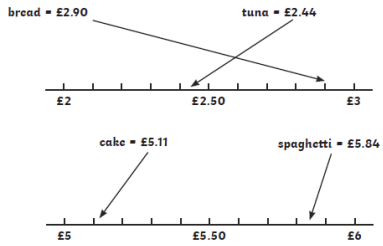
Rounds to £6	Rounds to £7
£6.05 £6.20	£6.50 £6.90

3) a)

	Actual Amount Saved	Amount Saved When Rounded to the Nearest Pound
Week 1	£1.47	£1
Week 2	£2.54	£3
Week 3	amount given that rounds to £2	£2
Week 4	amount given that rounds to £4	£4

b) George will not have enough. If he saves approximately the same amount next month, he will only have saved approximately £20.

1) a) bread = £3
tuna = £2
cake = £5
spaghetti = £6



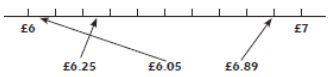
b) bread and tuna = £5
cake and spaghetti = £11

2)

Medium:

1) Morgan is correct. The approximate cost of the items rounded to the nearest pound is £13 and therefore Mum's change would be approximately £7.

2) a)



b) £6.25 and £6.05

3) a) False. Purses A, B and D each round to £11.

b) True. B rounds to £11 and E rounds to £9, and £11 + £9 = £20.

c) False. The approximate total in all the purses put together is £52, which would not be enough.

3 a) Draw arrows to estimate where each amount is on the number line.

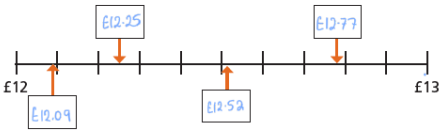
£8.60 £9.00 £8.45 £8.89

Which amounts were difficult to place on the number line?

b) Which amounts round to £9?

£8·60 £8·89

4 a) Write an estimate for each of the missing amounts.



b) Which amounts round to £12?

£12·09 £12·75

5 Eva buys a book for £4.85 and a pen for £2.70

What would be a more accurate estimate for Eva to make?

£5 + £3 = £8

Explain your answer.

Spicy:

5 Eva buys a book for £4.85 and a pen for £2.70

What would be a more accurate estimate for Eva to make?

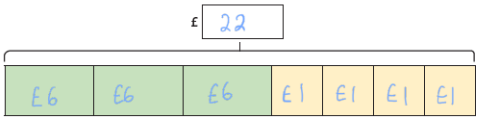
£5 + £3 = £8

Explain your answer.

6 A football costs £5.65 and cones cost £1.49 each.

Alex wants to buy three footballs and four cones for the football team.

a) Round the amounts and complete the bar model to estimate the total cost.



b) Alex has this much money.

Does Alex have enough money?

Talk about it with a partner.

7 Ron and Rosie have bought these items.

Ron Rosie

Round each amount to find an approximate total.

Write <, > or = to compare Ron and Rosie's totals.

Rosie's total		Ron's total
£24	<	£27

8 Filip is thinking of an amount of money.

- The amount rounds to £22 to the nearest pound.
- In the pence, there is an even amount of ones and an odd amount of tens.
- In the pence, the tens digit is less than the ones digit.

What amounts could Filip be thinking of?

e.g. £21·78

Compare answers with a partner.

1) a) £2.74 rounds to £3. £27 ÷ 3 = 8
Lily has bought the same sandwich for 8 days.

b) 3 × 7 = 21 days
21 × £3 = £63

2) a) pineapple

b) The approximate total for two of each item is £18. The change for this from a £20 note would be £2.

c) Answers will vary. Accept any answer where the approximate costs add up to £10. Example answers:
- 2 boxes of strawberries, 1 pineapple, 1 bag of bananas
- 5 mangos, 1 pineapple, 1 box of strawberries

3) a) Answers will vary, but should meet the criteria given by all three of the statements about Fatimah, Noah and Grace and have a total of less than £15. It does not matter which price is given to which toy. For example:

Toy 1 = £4.10

Toy 2 = £4.20

Toy 3 = £5.10

Toy 4 = £1.55

Total = £14.95

b) Answers will vary.

Example answer based on prices given in (a):

Fatimah bought toys 1, 2 and 3.

Noah bought toy 4 .

Grace bought toys 1 and 2.

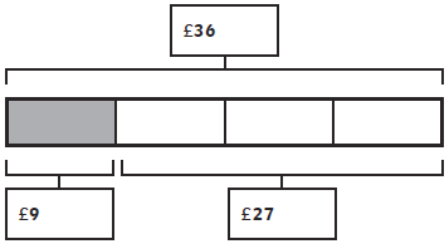
Thursday Four Operations:

Starter:

A. 456 x 100 = 45 600	B. 89 = 457 – 368
C. 5 + 3 + 2 = 10	D. 14 x 8 = 112

Mild

1)



a) **The game cost £9. (36 ÷ 4 = 9)**

b) **He would have £27 left. (36 – 9 = 27)**

2) a) **£11.80**

b) **£25.20**

3) a)

Item	Sale Price	Full Price
computer game	£16	**£32**
art set	£9	**£18**
book	£5.30	**£10.60**
drawing pad	£2.50	**£5**

b) **£32.80**

c) **£65.60**

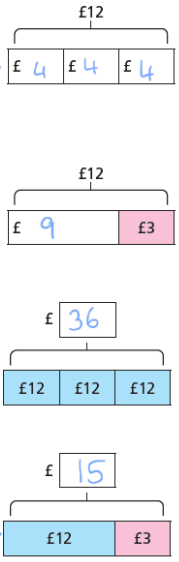
1 a) Match the problems to the bar models.

Nijah has £12. Her mum gives her £3 more. How much does she have now?

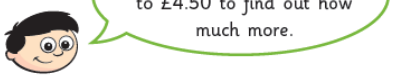
Nijah has £12. She buys a book for £3. How much does she have now?

Nijah has £12. She shares it between 3 of her friends. How much does each friend get?

Nijah has £12. Her friend has 3 times as much. How much does her friend have?



2 A child's ticket to the cinema costs £4.50 and an adult's ticket costs £7.95
Dexter wants to know how much more an adult's ticket costs than a child's ticket.

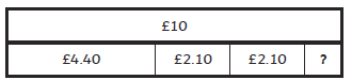


Do you agree with Dexter? No

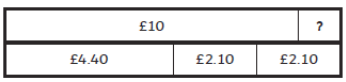
Explain your answer.

Medium

1) a)



✓



☐

b) **£4.40 + £2.10 + £2.10 = £8.60**

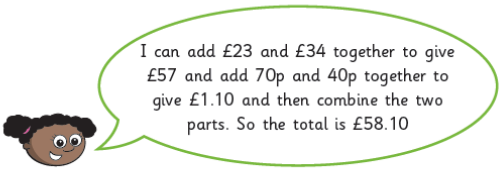
£10 - £8.60 = £1.40

She should have £1.40 change.

2)

Paula	Lisa	Jed	✓ or ✗
£6.50	£7.25	£13	✓
£4	£3.80	£8	✗
£6.40	£5.80	£3.20	✗
£5.30	£6.70	£10.60	✓

3 Whitney is finding the total of £23.70 and £34.40

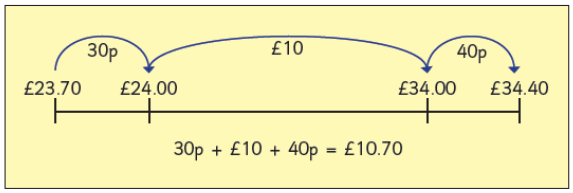


Use Whitney's method to complete the additions.

a) £8.60 + £7.80 = £16.40

b) £11.80 + £9.25 = £21.05

4 Teddy uses a number line to find the difference between £23.70 and £34.40



Use Teddy's method to help you complete the sentences.

a) The difference between £17.30 and £32.45 is £15.15

b) The difference between £42.11 and £22.65 is £19.46

Spicy

5 A shop sells these items.

a) Scott buys some marbles, a book and a cap.

He pays with a £20 note.

How much change does he get?

£ 1.90

b) Esther buys three sets of headphones.

She has a voucher for £5 off the total.

How much does Esther need to pay?

£ 60.97

c) Dani buys a cap and some marbles.

Tom buys a book.

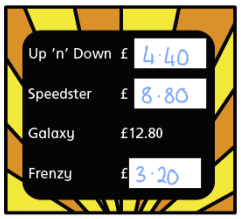
How much more does Dani spend than Tom?

£ 7.30

6 The board shows the cost of different rides at a theme park. Some of the prices are missing.

Use the clues to work out the missing prices.

- Frenzy costs one quarter of the price of Galaxy.
- Speedster costs double the price of Up 'n' Down.
- The combined cost of Galaxy and Up 'n' Down is £17.20



1) 2 adults and 10 children

6 adults and 5 children

2) With Voucher 1:
£8.75 + £2.50 + £3.99 = £15.24

With Voucher 2:
£8.75 × 2 = £17.50
£2.50 × 2 = £5
£3.99 × 2 = £7.98

£17.50 + £5 + £7.98 = £30.48
£30.48 - £15 = £15.48

Voucher 1 would give the greater savings.

3) a) £3.60

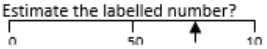
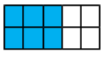
b) A set of clues which identify a different amount.

Challenge:

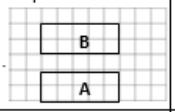
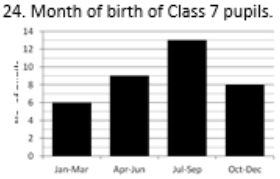
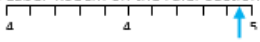
1. A
2. D

Friday

Mild

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure and Geometry	
1. What is the missing number? 0 50 100 150 ☐ 250	3:1 **200**	11. 24 ÷ 8 =	3:10 **3**	23. The jug holds $1\frac{1}{2}$ litres of liquid. If the jug is half full, how many millilitres does it contain? 	3:19 **750**
2. What is the **4** worth in this number? 924	3:2 **4 units**	12. 6 x 8 =	3:10 **48**		
3. Write this number in words. 261	3:3 **Two hundred and sixty one**	13. 13 x 4 =	3:11 **52**	22. Tom bought 5 cans of pop that were 40p each. How much did they cost in total?	3:21 **£2**
4. Estimate the labelled number? 	3:4 **70-80**	14. I buy 9 packs of balloons. I have 99 balloons. How many are in each pack?	3:12 **11**		
5. Write a number that is bigger than 592 using the same three digits.	3:5 **925 or 952**	16. Circle $\frac{3}{10}$ of the marbles. 	3:13 **3**	23. What time does this clock show? 	3:22 **Five (minutes) to nine**
6. 612 - 10 =	3:6 **602**	16. What fraction is shaded? 	3:14 $\frac{6}{12}$ or $\frac{1}{2}$		
7. 326 - 78 =	3:7 **248**	17. What is $\frac{1}{5}$ of 30?	3:15 **6**	24. How many right angles make three quarters of a turn? 	3:27 **3**
8. Circle the best **estimate** to 52 + 179 220 (230) 240 250	3:8 **230**	18. This shape is in tenths. Shade in $\frac{3}{5}$. 	3:16 **6**		
9. Use 46 + 27 = 73 to help solve: 730 – 270 = ☐	3:9 **460**	19. Add the fractions. $\frac{3}{8} + \frac{2}{8}$	3:17 $\frac{5}{8}$	25. Draw a horizontal line on the grid. 	3:28 **Line drawn**
10. What is the missing number? 213 - ☐ = 149	3:9 **64**	20. Write the smallest fraction. $\frac{1}{9}$ $\frac{1}{7}$ $\frac{1}{4}$ $\frac{1}{6}$	3:18 $\frac{1}{9}$		

Medium and Spicy

A: Place Value, Add and Subtract		B: Multiply, Divide and Fractions		C: Measure, Geometry and Statistics	
1. What is the missing number? 18 24 ☐ 36 42	4:1 **30**	11. 7 x 9 =	4:9 **63**	21. What is the area of this shape? 	4:20 **16cm²**
2. What is the missing number? 2,000 3,000 4,000 ☐	4:1 **5,000**	12. Circle the sum that is the same as 16 x 7: (4 x 7 x 4) 2 x 8 x 6	4:10 **4x7x4**		
3. Round this number to the nearest 100: 3,192	4:2 **3,200**	13. 138 x 9 =	4:11 **1,242**	22. Circle the name that describes a 90° angle. (Right angle) Obtuse angle Acute angle	4:24 **Right-angle**
4. What is 1,000 **less** than 10,293?	4:2 **9,293**	14. To work out 9 x 58 you could do: ☐ x 9 + 8 x ☐	4:12 **50, 9**		
5. What is 12 **less than** 4?	4:3 **-8**	15. Circle the **equivalent fraction** to $\frac{1}{9}$. $\frac{3}{2}$ $\frac{4}{1}$ $\frac{5}{3}$	4:13 $\frac{3}{27}$	23. To transform shape A onto B: Translate A ☐ units ☐. 	4:27 **3, up**
6. What is the value of the **2** in this number? 6,283	4:4 **200**	16. Complete the sequence: $\frac{37}{10}$ $\frac{38}{10}$ $\frac{39}{10}$ ☐	4:14 $\frac{40}{100}$		
7. Write the number 91 in Roman numerals.	4:5 **XCI**	17. $\frac{4}{3} + \frac{1}{3}$	4:15 $\frac{5}{3}$	24. Month of birth of Class 7 pupils. 	4:29 **15**
8. 2,472 - 598 =	4:6 **1,874**	18. Write 0.01 as a fraction.	4:16 $\frac{1}{100}$		
9. Write the sum to check 3,250 - 975 = 2,275: 2,275 ☐ 975 ☐ 3,250	4:7 **+, =**	19. 11 ÷ 10 =	4:17 **1.1**	How many were born in the first half of the year?	4:30 **36**
10. There are 73 people on a bus. 15 get off & 28 get on. How many now?	4:8 **86**	20. Label 4.95cm on the ruler section: 	4:18 **Arrow**	25. How many pupils are in Class 7?	
Total (A)		Total (B)		Total (C)	