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Preperation Pack for CFE National 4



Hi everyone, hope you are safe and well and are ready to begin your journey through National 4 Maths this year.

The following questions will help you prepare for the early stages of the National 4 course which will begin in the coming weeks. Please spend some time practising these questions, paying close attention to your layout. Check your answers from the solutions provided at the bottom of the document and learn from any mistakes you make.

If you require help with any of the questions then please contact your Maths teacher via “Show My Homework” or via their Glow email address.

All the best with your Maths, stay safe and hope to see you all back in Garnock soon.

Use numerical skills to solve straightforward real – life problems involving money/time/measurement

Four Rules

1. Copy and complete the following sums:

$$\begin{array}{r} \text{(a)} \quad \begin{array}{r} 2 \ 5 \ 6 \ 5 \\ + \ 7 \ 2 \ 9 \ 7 \\ \hline \end{array} \quad \text{(b)} \quad \begin{array}{r} 7 \ 3 \ 6 \ 3 \\ - \ 2 \ 5 \ 7 \ 8 \\ \hline \end{array} \quad \text{(c)} \quad \begin{array}{r} 2 \ 5 \ 7 \\ \times \ 8 \\ \hline \end{array} \end{array}$$

2. (a) Find the sum of $245 + 567 + 7382$

(b) What is the difference between 2637 and 1795?

3. In Notlimah High School there are the following number of pupils in S1 – S4.

S1 - 340

S2 - 371

S3 - 296

S4 - 254



How many pupils is this altogether in S1 – S4?

4. The Smythes set out on a journey of 234 miles. After they have travelled 147 miles they stop for a break.

How many kilometres do they still have to travel?



5. At four shops Fiona spends the following amounts: £14.78, £7.45, £5.10 and £10.54.
- (a) How much did Fiona spend altogether?
- (b) How much did she have left from £50?

6. If it costs £8.60 to hire a bike for a day, how much would it cost to hire it for the whole of the month of June?



7. Find the total cost of :
- 3 tee shirts at £12.75
- 5 jumpers at £27.50
- 4 tops at £22.40
- 1 coat at £87.40

8. Sanjay earns £12 a day. How much will he earn in a year when he works 312 days?

9. 780 pupils in a school have to be put into classes of 30.
- How many classes would there be?

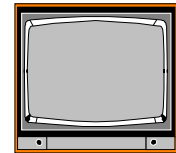
10. Jotters come in packs of 25. If the Maths Department need 1600 jotters, how many packs should they order?

11. A can of juice costs 30p.
- (a) How many cans could be bought for £1.30.
- (b) How much money would be left over?



12. A netball team consists of 7 players.
- (a) How many teams can be formed from 60 people?
- (b) How many would have to sit out?

- 13.** A gardener has 329 plants which he wants to put in rows of 12.
How many rows will he plant and how many plants will be left over?
- 14.** Mrs. Mackay bought a packet of tea costing £3.47 and a packet of sugar costing 98p.
How much did she spend altogether?
- 15.** Margaret gets £25 a week for pocket money. She spends £14.65 on bus fares, £4.75 on sweets and she saves the rest.
- (a) How much does she spend on bus fares and sweets?
- (b) Margaret is saving up to buy a new bike which costs £187. How many weeks will it take her to save enough to buy her bike?
- 16.** Stewart has £50 to buy some presents. He is going to buy a computer game costing £15.99, a book costing £12.75 and some perfume costing £22.40.
Does he have enough money to buy all of these?
- 17.** Tommy is buying a new television. He cuts out a voucher from a newspaper which is offering a discount of £75 on it.
Tecom is selling the television for £640.
How much would Tommy actually pay using his voucher?
- 18.** The local DIY store was charging £15.50 for a 2-litre can of paint. In a sale they were selling it for £12.95.
How much discount was this?
- 19.** A pair of shoes cost £42.70 in a sale after £12.30 had been given as a discount.
How much were the shoes before the sale?
- 20.** Sunita wants a new bike. The shop was offering a discount of £45 on it.
The full price of the bike was £176.
How much did Sunita actually pay for her bike?



21. James saw an advert in the paper for a holiday in Paris. It cost £235 per person but the travel agent was offering it for £170 per person as a last minute deal.

James decided to take his girlfriend.

How much did he save altogether on the two packages?

22. A school got a discount of £250 on the full price of jotters. They paid £840 for them.
How much were they before the discount was given?

23. The full price of a computer in Computer world was £500 and in World of Computers was £555 with a discount of £60 offered.

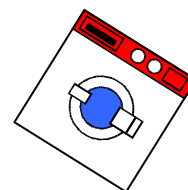
Which shop was the cheaper and by how much?



24. A school bought some calculators which cost £74.20. This included £10.20 VAT. How much will the calculators actually cost the school if there was no VAT charged?

25. In a "Special Offer" a washing machine is being offered "without VAT". The price is £336 but Jean only pays £280.

How much VAT was included before the offer?



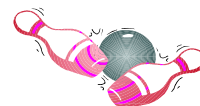
26. Claire bought 12 large bottles of "Loca" for a party. They cost £1.19 each .

How much did she pay altogether?

27. It cost Elsie £34.80 to buy 8 Easter eggs for her friends. How much was this for each one?

28. 35 people were going ten-pin bowling. It cost each person £5.50 for 2 games.

How much did it cost altogether for the 35 people?



29. For her birthday, Naaila took her 4 best friends to the cinema and then to Le Hut de Pizza.

The total cost of the outing was £44.75. How much was this for each person?

{CAREFUL!}

- 30.** 6 friends had a day out to the seaside. They all had ice cream which cost £1.45 each.
Two had a pizza costing £8.25 each, three had a fish supper costing £6.30 each and the sixth one had a burger costing £5.49.

- (a) Calculate the total cost of the day out.
(b) They decided to each put £8 in a "kitty". Was this enough to pay for everything they had?
(c) How much over or under were they?

- 31.** Derek bought a house for £23000 and spent another £7000 doing lots of repairs to it and then sold it for £36000.

How much of a profit did he make?

- 32.** Julie is a florist and makes up floral gifts to sell for charity.
It costs 85p to make each one and Julie sells them for £1.50.



- (a) How much profit does she make on each one?
(b) She sold 150 altogether. How much did Julie make for charity altogether?

- 33.** The school tuck shop bought a box of 48 chocolate bars which cost £15.36.
They were sold for 40p each.



How much profit was made if all the bars were sold?

- 34.** A few years ago it cost £1.50 to buy a share in an enterprise company.

- (a) Sara bought 250 shares. How much did they cost her?

Nowadays they are worth only £1.25 each.

- (b) How much in total has Sara lost on her 250 shares?

- 35.** Bernie was making a patio in his back garden. He bought 50 slabs which cost him a total of £175.

He only used 42 of them and sold the rest to a friend for £3 each.

How much did he lose on each of the slabs he sold to his friend?

36. 10 people go out for a meal. The total bill for the meal is £231.
How much is this for each person?
37. The cost of entry to the Home Show was £6.50 for adults and £4.50 for children.
How much would it cost Barry to take his wife and 2 children?
38. Anna gets paid £16 464 each year and gets it in 12 equal amounts.
How much does she get each time?
39. Steven is tiling his kitchen and needs 435 tiles.
The tiles come in boxes of 25.
(a) How many boxes of tiles would he need?
(b) How many tiles would Steven have left over?
40. Linda is going to the 'Don't Get Fat' club to try to lose some weight. Her starting weight is 56.4kg.

This table shows her progress card for the first few weeks:



Week Number	Lost	Gained	Weight
1	2.3kg		
2	1.6kg		
3		0.4kg	
4	0.9kg		



Complete the table to show Linda's progress.

41. David wants a new bike that costs £216.

His Mum gives him £108 and he saves up the rest from his paper round.

If he manages to save £9 a week, how many weeks will it take him to get his bike?

42. At the seaside three friends have a game of crazy golf. Here are their scores:

Hole Number	1	2	3	4	5	6	7	8	9
Polly	3	5	4	7	1	3	3	3	4
Wally	2	4	6	8	2	3	2	4	1
Doodle	3	5	1	4	4	5	6	3	6



Who won the game?

43. Here are the prices of several items in the local chemist:

Shampoo: £2.35

Deodorant: £1.87

Shower Gel: £2.75

Shaving Foam: £2.24

Toothpaste: £0.97

Handwash: £1.24

- (a) Adrian buys shampoo, deodorant and toothpaste.

How much does it cost him altogether?

- (b) The next week there is a special offer: Buy 3 items and get the cheapest one free!

How much would the same three items have cost Adrian now?

- 44.** A section of the Clyde walkway is 17km long. Kashef and his friend walked different parts of it on three different days. On day 1 they walked 5.73km and on day 2 they walked 4.05km.
- (a) How far did they walk altogether over the two days?
- (b) If they walked the remainder of the 17km on day 3, how far did they walk on that day?

ANSWERS

Four Rules

- | | | | | | | |
|------------|-----|------------------------------|------------|--------------------------|-----|-------------|
| 1. | (a) | 9862 | (b) | 4785 | (c) | 2056 |
| 2. | (a) | 8194 | (b) | 842 | | |
| 3. | | 1261 | 4. | 87 | | |
| 5. | (a) | £37.87 | (b) | £12.13 | | |
| 6. | | £258 | 7. | £352.75 | | |
| 8. | | £3744 | 9. | 26 classes | | |
| 10. | | 64 packs | 11. | (a) 4 cans | (b) | 10p |
| 12. | (a) | 8 teams | (b) | 4 people | | |
| 13. | | 27 rows with 5 plants over | | | | |
| 14. | | £4.45 | 15. | (a) £19.40 | (b) | 34 weeks |
| 16. | | £1.14 short | 17. | £565 | | |
| 18. | | £2.55 | 19. | £55 | | |
| 20. | | £131 | 21. | £130 | | |
| 22. | | £1090 | 23. | World of Computers by £5 | | |
| 24. | | £64 | 25. | £56 | | |
| 26. | | £14.28 | 27. | £4.35 | | |
| 28. | | £192.50 | 29. | £8.95 | | |
| 30. | (a) | £49.59 | (b) | no | (c) | £1.59 short |
| 31. | | £6000 | 32. | (a) 65p | (b) | £97.50 |
| 33. | | £3.84 | 34. | (a) £375 | (b) | £62.50 |
| 35. | | 50p | 36. | £23.10 | | |
| 37. | | £22 | 38. | £1372 | | |
| 39. | (a) | 18 boxes | (b) | 15 tiles over | | |
| 40. | | 54.1kg; 52.5kg; 52.9kg; 52kg | | | | |
| 41. | | 12 weeks | 42. | Wally | | |
| 43. | (a) | £5.19 | (b) | £4.22 | | |
| 44. | (a) | 9.78km | (b) | 7.22km | | |