

Name:

Exam Style Questions

Reverse Percentages



Equipment needed: Calculator, pen

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial

www.corbettmaths.com/contents

Video 240



Answers and Video Solutions



1. Patrick invested money into a special savers bank account.
Each year money in the account earns 4% interest.



After one year, the total amount of money in the account was £291.20

How much did Patrick invest?

£.....
(3)

-
2. The population of Sandcliff has decreased by 2% over the past year.
The population of Sandcliff this year is 52920



Calculate the population of Sandcliff last year.

.....
(3)

3. A box contains red and yellow marbles.
40% of the marbles in the box are yellow.



There are 80 yellow marbles in the box.

Work out the total number of marbles in the box.

.....
(2)

-
4. Ottawa is the capital city of Canada.
The population of Ottawa is 1,020,000.
This population is 2.5% of the total population of Canada.



What is the total population of Canada?

.....
(3)

5. A lamp is on sale at £22.05
This is a 10% reduction of the normal price.



What was the price of the lamp before the reduction?

£.....
(3)

-
6. Jacob buys a watch costing £84
This cost includes VAT at a rate of 20%.



How much is the watch without VAT?

£.....
(3)

7. A cafe sells 3 types of hot drinks: coffee, tea or hot chocolate.



On Tuesday morning, the cafe sold 96 coffees.
This was 60% of the total number of hot drinks sold.

Work out the total number of hot drinks sold on Tuesday morning.

.....
(2)

8. Jennifer has 54 books.



This number of books is 80% more than the number she had last month.

How many books did Jennifer have last month?

.....
(3)

9. Lauren is given a 12% pay rise.
Her new salary is £24,080



What was Lauren's salary before the pay rise?

£.....
(3)

-
10. A limited edition bag of flour contains 25% more than the standard bag.
The limited edition bag contains 650g of flour.



How much flour is in the standard bag?

.....g
(3)

11. A fish tank sprung a leak and loses 45% of its water.
There is now 363 litres of water in the fish tank.



How much water was in the fish tank before the leak?

.....|
(3)

-
12. Mrs Reed buys a van costing £11760
This cost includes VAT at a rate of 20%.



How much is the VAT?

£.....
(3)

13. In a sale the price of a sofa is reduced by 70%.
The sale price is £255



Work out the price before the sale.

£.....
(3)

-
14. Cormac buys a new bicycle.



He has a voucher that gives him 6% off the usual price.
Cormac pays £799 for the bicycle.

Work out how much money Cormac saved by using the voucher.

£.....
(3)

15. Rosie sold her house for £180000



The price of her house depreciated by 6.25% since Rosie originally bought it.

Work out how much Rosie originally paid for the house.

£.....
(3)

16. The number of visitors to a museum increased 16.4% between 2022 and 2023.



The number of visitors in 2023 was 97776.

Calculate the number of visitors in 2022.

.....
(2)

17. Lukas cycled 10% further in October than September.



Lukas cycled 308km in October.

Work out how much further Lukas cycled in October than September

.....
(3)

18. Emilia saves £350 each month for a year towards a car.



She buys the car by paying a deposit and 60 monthly payments of £180

Emilia uses the money she saved to pay 80% of the deposit.

Work out the total cost of the car.

.....
(4)

19. Aisha bought a house two years ago.



The value of the house increased by 10% over the first year.
The value then increased by 8% the following year.

The house is now valued at £291060

Work out how much Aisha paid for the house two years ago.

.....
(3)

20. There are 6000 people at an ice hockey match.



The announcer says this is exactly 40% more people than the previous match.

Explain why the announcer is incorrect.

.....
.....
.....
.....

(4)

21. Cillian has saved 79% more money than his brother, Rufus.



Altogether they have £1618.20 in savings.

Work out how much money Cillian has saved.

.....
(4)

22. Lorcan has red and green apples.



A quarter of the apples are green.

Lorcan puts the apples in two boxes, A and B.

65% of the green apples are placed in box A.

There are 133 green apples are in box B.

Work out how many red apples Lorcan has.

.....
(4)

23. A football team has won 12% of the matches that they have ever played.



They have drawn a quarter of the rest of the matches.

The football team have lost 924 matches.

Work out the total number of matches played by the football team.

.....
(4)

24. Amie and Poppy were both given a pay rise.



Amie was given a 25% pay rise and Poppy a 4% pay rise.

The ratio of Amie's salary to Poppy's salary is now 9:13

Poppy's pay before the pay rise was £50000

Work out Amie's pay before the pay rise.

.....
(5)