

Name:

Exam Style Questions

Fractions: increasing or  
decreasing



Corbettmaths

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](http://www.corbettmaths.com/contents)

Video 141



Answers and Video Solutions



1.



**SALE**  
 **$\frac{1}{3}$  OFF ALL ITEMS**

The original price of a football is £12.  
What is the sale price of the football?

£.....  
(2)

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2. Increase £800 by  $\frac{1}{4}$



£.....  
(2)

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3. Decrease 150kg by  $\frac{1}{5}$



.....kg  
(2)

---

4. Decrease 21 by  $\frac{1}{7}$



.....  
(2)

5. Sarah normally earns £600 each month.



In December she is given a bonus of  $\frac{1}{5}$  of her normal pay.

(a) Work out  $\frac{1}{5}$  of 600.

£.....  
(1)

(b) Work out her total pay for December.

£.....  
(1)

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6. The value of a house increased by  $\frac{1}{10}$  over five years.



In 2020 the value of the house was £140,000  
Work out the value of the house in 2025.

£.....  
(2)

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7. Decrease 826 by  $\frac{5}{8}$



.....  
(2)

8. Matthew weighed 81kg before training for a marathon



His weight decreased by a  $\frac{1}{9}$

Work out his weight after the marathon.

.....kg  
**(2)**

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9. In 2024, Bristol United's average attendance was 2000



The following season, the average attendance increased by  $\frac{2}{5}$

Work out the average attendance in 2025

.....  
**(2)**

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10. Increase 24 by  $\frac{2}{3}$



.....  
**(2)**

11. Decrease 36 by  $\frac{3}{4}$



.....  
(2)

---

12. Increase 64 by  $\frac{3}{8}$



.....  
(2)

---

13. 380000 passengers departed an airport last year.



This year, the number of passengers is expected to increase by  $\frac{13}{200}$

Calculate the number of passengers that are expected to depart the airport this year.

.....  
(2)

14. Benjamin is starting a new training program.  
Each month he increases the distance he runs by  $\frac{3}{10}$



In month 1, he ran 20 miles.

(a) How far does Benjamin run in month 2?

.....miles  
**(2)**

(b) How far does Benjamin run in month 3?

.....miles  
**(2)**

(c) How far does Benjamin run in total over the first three months?

.....miles  
**(1)**

15. Last year Melissa was paid £2200 per month.  
Last year Natalie was paid £3200 per month.



Melissa's salary is increased by  $\frac{3}{5}$

Natalie's salary is increased by  $\frac{1}{8}$

Who is paid more each month this year?  
You must show your workings.

.....  
(4)

16. The population of an island in 2000 was 2385



By 2025 the population has decreased by  $\frac{2}{5}$

What was the population of the island in 2025?

.....  
(3)

17. The price of a new car is £18000



In a sale, the price is reduced by  $\frac{2}{9}$

David buys the car in the sale.

He pays a £2000 deposit and pays the rest over 20 monthly payments.

Find the cost of each monthly payment.

.....  
**(5)**