

Number

REVIEW IT!

 You may **not** use a calculator for these questions.

- 1 Write down a prime number and a factor of 12 that add up to 13.
- 2 Write 630 as a product of prime factors using indices.
- 3 Find the highest common factor of 18, 36 and 40.
- 4 Write these numbers in ascending order:
-3.2 -11.5 1.4 -8.3 -3.5
- 5 Calculate
a $£32.99 + £18.74$ b $£54.99 \div 3$
- 6 Work out
a 23×0.14 b 27×149
- 7 Work out $\frac{1}{3}$ of 81.
- 8 Work out $345 \div 11$, giving your answer as a mixed number.
- 9 a Write $\frac{3}{8}$ as a decimal.
b Write 0.7 as a percentage.
- 10 Give your answer to each of these calculations in its simplest form.
a Write 70% as a fraction.
b Write 0.8 as a fraction.
- 11 Which of these fractions is larger than $\frac{1}{4}$?
 $\frac{1}{2}$ $\frac{2}{7}$ $\frac{3}{11}$ $\frac{2}{5}$
- 12 Give your answer to each of these calculations in its simplest form.
a $\frac{3}{5} + \frac{1}{7}$ b $2\frac{1}{5} - \frac{7}{10}$ c $\frac{2}{3} \div \frac{4}{9}$
- 13 Which of these is larger?
 $0.25 - 0.07$ or $\frac{2}{3} - \frac{1}{2}$
- 14 Work out $\frac{3}{5} \times 1\frac{1}{4}$.
- 15 Write 0.045 as a fraction. Give your answer in its simplest form.
- 16 Find 25% of £8.60.
- 17 Work out
a $(-3)^2$ b $\sqrt[3]{125}$
- 18 Write each of the following in standard form
a 3 400 000 000 b 0.000000304
- 19 The length of a journey is measured as 37.6 miles to the nearest tenth of a mile.
Write down the error interval for the length of the journey.
- 20 Here are three cards.

2	5	1
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a Write down the largest two-digit multiple of 3 that can be made using the cards. Each card may be used only once.

b Write down all the two-digit numbers that can be made using these cards.

- 21 A unit of electricity costs 9.086p. On average a family uses 242.6 units a month.
a Work out an estimate for the cost of electricity for a year.
b Is your answer an overestimate or an underestimate? Give a reason for your answer.
- 22 At a school of 600 students, 40% of the students cycle to school and $\frac{1}{5}$ walk. The rest travel by bus. How many travel by bus?
- 23 Rhiannon's result in a test is less than 50%. Her mark is a multiple of 5. She answered more than $\frac{1}{3}$ of the questions correctly. What is the smallest value her mark could be?
- 24 Barbara says: 'the sum of three different prime numbers will always be odd'.
Is she correct? Explain your answer.

 You may use a calculator for these questions.

- 25 In a sale, a musical instrument that normally costs £349 is reduced by 20%. What is the new price of the instrument?
- 26 Round 3.05092 to
a 1 decimal place b 3 significant figures
- 27 Round 324 567 to
a the nearest thousand
b 2 significant figures
- 28 Find the value of 3^6 .
- 29 Four people share the cost of an outing equally between them. The costs are:
Group travel card £26.25
Picnic £18.23
4 tickets at £5.50 each
How much does each person pay?
- 30 19% of people in a town own a cat. The population is 18 000. How many people own a cat?
- 31 The table gives information about the price (in pence) of fuel in the UK.

2010	2011	2012	2013	2014	2015	2016
111.4	127.8	133.4	132.9	130.1	108.2	102.3

- a Between which two years was the greatest fuel price increase?
- b Between 2016 and 2017 the price increased by 10%. What is the price of petrol in 2017?