

**Fractions, Decimals and Percentages – 2021/20 GCSE Mathematics Higher****1. Nov/2021/Paper\_J560/04/No.9**

The price of a plane ticket is increased by 15% to £1426.

Find the original price of the plane ticket.

£ ..... [3]

**2. Nov/2021/Paper\_J560/05/No.1**

Work out.

$$3\frac{4}{7} \times \frac{7}{10}$$

Give your answer as a mixed number in its simplest form.

..... [3]

**3. Nov/2021/Paper\_J560/05/No.9**

A worker received a 10% pay increase in 2017 and a further 10% pay increase in 2018.  
The worker says

Over these two years, my pay increased by  $10\% + 10\% = 20\%$ .

The worker is incorrect.

Work out the correct percentage increase.  
You must show your working.

..... [5]

**4. Nov/2021/Paper\_J560/05/No.3**

A car mechanic has a tin containing 5 litres of engine oil.  
Each week they use 450 millilitres of this oil for their vehicles.

The car mechanic says

After 9 weeks I will have used over 80% of the oil in this tin.

Are they correct?

Show how you decide.

.....  
..... [5]

**5. Nov/2021/Paper\_J560/05/No.13**

(a) Write  $\frac{3}{11}$  as a recurring decimal.

(a) ..... [2]

(b) Write 0.48 as a fraction in its simplest form.

(b) ..... [3]

**6. Nov/2020/Paper\_J560/04/No.2**

James is taking three examination papers in Spanish.  
Here are his first two results.

$$\text{Paper 1: } \frac{43}{80}$$

$$\text{Paper 2: } \frac{38}{65}$$

Paper 3 is out of 95.

The marks in each of the three papers are added together.

Find the lowest mark that James needs in Paper 3 to achieve 60% of the total marks.

..... **[4]**

**7. Nov/2020/Paper\_J560/05/No.5**

Charlie and Jasmine share cartons of apple juice.

Charlie drinks  $\frac{1}{3}$  of a carton every day.

Jasmine drinks  $\frac{2}{5}$  of a carton every day.

Any apple juice left in a carton at the end of the day is used the following day.

The cost of a carton is 70p.

Charlie and Jasmine buy just enough cartons to last them for 10 days.

How much do they spend in total for these cartons?

Give your answer in £.

Show your working.

**8. Nov/2020/Paper\_J560/05/No.10**

Each day, Eve records how long it takes her to complete a puzzle.

On Friday, she took 50% less time than on Thursday.

On Saturday, she took 20% less time than on Friday.

On Saturday, she takes 36 minutes to complete the puzzle.

How many minutes did she take to complete the puzzle on Thursday?

Show your working.

..... minutes **[5]**

9. Nov/2020/Paper\_J560/06/No.18

Write  $0.4\dot{1}\dot{6}$  as a fraction in its simplest form.

You must **show full working** in support of your answer.

..... [3]