Question 1: Write these decimals as percentages

(a) 0.31  (b) 0.16  (c) 0.22  (d) 0.06  (e) 0.02  (f) 0.8
(g) 0.4   (h) 0.185 (i) 0.204 (j) 0.092 (k) 1.24  (l) 2.8

Question 2: Write these percentages as decimals

(a) 18%    (b) 27%   (c) 60%   (d) 3%   (e) 55%   (f) 80%
(g) 1%     (h) 9.2%  (i) 41.5% (j) 0.8% (k) 180%  (l) 315%

Question 3: Write these decimals as fractions

(a) 0.7    (b) 0.4   (c) 0.15  (d) 0.88 (e) 0.79 (f) 0.04
(g) 0.404  (h) 0.125 (i) 0.625 (j) 0.123 (k) 1.6 (l) 2.25

Question 4: Write these fractions as decimals

(a) \( \frac{3}{10} \)  (b) \( \frac{3}{5} \)  (c) \( \frac{81}{100} \)  (d) \( \frac{9}{20} \)  (e) \( \frac{1}{8} \)  (f) \( \frac{19}{40} \)
(g) \( \frac{7}{8} \)  (h) \( \frac{13}{20} \)  (i) \( \frac{33}{50} \)  (j) \( \frac{19}{10} \)  (k) \( \frac{83}{20} \)  (l) \( \frac{123}{40} \)

Question 5: Write these percentages as fractions

(a) 70%    (b) 60%   (c) 95%   (d) 24%  (e) 79%  (f) 82%
(g) 37.5%  (h) 1.8%  (i) 11.5% (j) 0.06%  (k) 160% (l) 285%

Question 6: Write these fractions as percentages

(a) \( \frac{9}{10} \)  (b) \( \frac{1}{5} \)  (c) \( \frac{99}{100} \)  (d) \( \frac{3}{25} \)  (e) \( \frac{17}{20} \)  (f) \( \frac{7}{8} \)
(g) \( \frac{7}{40} \)  (h) \( \frac{3}{8} \)  (i) \( \frac{43}{50} \)  (j) \( \frac{123}{200} \)  (k) \( \frac{5}{9} \)  (l) \( \frac{53}{20} \)

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Question 6: Which is larger? Show your working out

(a) 78% or 0.8    (b) $\frac{1}{5}$ or 0.23    (c) $\frac{3}{4}$ or 0.73
(d) $\frac{17}{20}$ or 0.87    (e) $\frac{5}{8}$ or 0.61    (f) 109% or 1.1
(g) 43% or $\frac{17}{40}$    (h) $\frac{13}{10}$ or 128%    (i) $\frac{5}{2}$ or 2.8

Question 7: Arrange the following in order, from smallest to largest.

(a) $\frac{1}{4}$, 0.19, 0.3, 26%, $\frac{1}{5}$    (b) 0.9, $\frac{17}{20}$, $\frac{4}{5}$, 88%, 0.79
(c) 11%, 0.2, 13%, $\frac{3}{20}$, $\frac{1}{8}$    (d) $\frac{2}{3}$, 65%, 0.68, $\frac{7}{10}$, $\frac{5}{8}$
(e) 101%, $\frac{11}{10}$, 1.2, $\frac{19}{20}$, 0.9    (f) 1.5, $\frac{5}{3}$, 82%, $\frac{7}{4}$, $\frac{37}{40}$

Question 8: Copy and complete the tables below

(a)

<table>
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<tr>
<th>Fraction</th>
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<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>$\frac{4}{5}$</td>
<td>0.8</td>
<td>10%</td>
</tr>
<tr>
<td>$\frac{3}{20}$</td>
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<td></td>
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(b)

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<td>$\frac{3}{8}$</td>
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(c)

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<td>10.5%</td>
</tr>
<tr>
<td>$\frac{9}{80}$</td>
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</tbody>
</table>

(d)

<table>
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</thead>
<tbody>
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<td>$\frac{19}{10}$</td>
<td>1.9</td>
<td></td>
</tr>
<tr>
<td>$\frac{11}{4}$</td>
<td></td>
<td>265%</td>
</tr>
</tbody>
</table>
Question 1: \(\frac{3}{5}\) of a fruit punch is orange juice.

What percentage of the fruit punch is orange juice?

Question 2: 18% of a class wear glasses.

What fraction of the class wear glasses?

Question 3: Benny says that 0.2 is smaller than 19%.

Is he correct? Explain your answer.

Question 4: Mike got 58% of questions correct on a test.

What fraction of questions did he get correct?

Question 5: A school has three year groups: year 7, year 8 and year 9.

30% of the students are in year 7
36% of the students are in year 8

What fraction of the students at the school are in year 9?

Question 6: In a crate, there are 40 apples.

3 of the apples are bad.

What percentage of apples in the crate are good?

Question 7: James sat an English quiz.

He scored 7 out of 8.

What percentage did he get right?

Question 8: Randalstown Rugby Club play 20 matches and win 17 of the matches.

What percentage of the matches did Randalstown win?

Question 9: Ricky has sat his summer exams.

His scores are below.

(a) Change his scores into percentages.

Give each answer to 1 decimal place.

(b) List Ricky's top 3 subjects

Answers

Maths: 17 out of 22
English: 19 out of 30
Science: 51 out of 60
French: 11 out of 12
German: 10 out of 14
Music: 19 out of 42
Geography: 19 out of 28
History: 30 out of 38
Welsh: 65 out of 70