Topic Test: Fractions *Name:*_____

1. Dave earns £14 per hour.

a) Mike earns half as much as Dave. Work out how much Mike earns per hour.

(1)

b) On Tuesday, Mike worked for 8 hours. Work out how much he earned altogether.

(1)

c) Will earns only a quarter as much as Dave. Work out how much Will earns per hour.

(1)

d) On a Sunday, Will is paid £6 per hour. How much would he earn in 9 hours?

(1)

2. a) Circle the two fractions in this list which are **equivalent**: $\frac{3}{4}$ $\frac{15}{25}$ $\frac{10}{18}$ $\frac{6}{10}$ $\frac{9}{12}$

(1)

b) Circle a *different* pair of fractions in this list which are **equivalent**: $\frac{3}{4}$ $\frac{15}{25}$ $\frac{10}{18}$ $\frac{6}{10}$ $\frac{9}{12}$

(1)

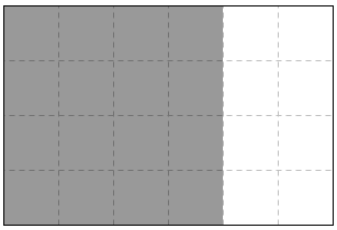
3. Simplify the following fractions fully:

a) $\frac{5}{10} =$ b) $\frac{8}{12} =$ c) $\frac{200}{600} =$ d) $\frac{12}{60} =$ e) $\frac{18}{30} =$ f) $\frac{20}{25} =$

(6)

4.

a) What fraction of this shape is shaded? Give your answer in its simplest form:



(2)

5. a) In a test, one student got 15 marks out of 20. Work out what fraction he got right. Simplify your answer fully.

(2)

b) What percentage did he get right?

(1)

5. a) Write 0.05 as a fraction:

(1)

b) Write 80% as a decimal.

(1)

c) Write $\frac{1}{50}$ as a percentage.

(1)

6. a) Work out $\frac{2}{5}$ of $20kg$

(1)

b) Work out $\frac{8}{11} + \frac{4}{33}$

(2)

c) Work out $\frac{3}{8} - \frac{1}{6}$

(2)

(Total marks: out of 25)

Topic Test: Fractions ***SOLUTIONS***

1. Dave earns £14 per hour.

a) Mike earns half as much as Dave. Work out how much Mike earns per hour.

£7

(1)

b) On Tuesday, Mike worked for 8 hours. Work out how much he earned altogether.

£56

(1)

c) Will earns only a quarter as much as Dave. Work out how much Will earns per hour.

£3.50

(1)

d) On a Sunday, Will is paid £6 per hour. How much would he earn in 9 hours?

£54

(1)

2. a) Circle the two fractions in this list which are **equivalent:** $\mathbf{\frac{3}{4}}$ $\frac{15}{25}$ $\frac{10}{18}$ $\frac{6}{10}$ $\mathbf{\frac{9}{12}}$

(1)

b) Circle a *different* pair of fractions in this list which are **equivalent**: $\frac{3}{4}$ $\mathbf{\frac{15}{25}}$ $\frac{10}{18}$ $\mathbf{\frac{6}{10}}$ $\frac{9}{12}$

(1)

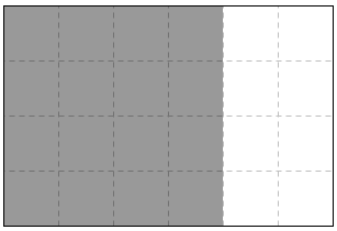
3. Simplify the following fractions fully:

a) $\frac{5}{10} = \mathbf{\frac{1}{2}}$ b) $\frac{8}{12} = \mathbf{\frac{2}{3}}$ c) $\frac{200}{600} = \mathbf{\frac{1}{3}}$ d) $\frac{12}{60} = \mathbf{\frac{1}{5}}$ e) $\frac{18}{30} = \mathbf{\frac{3}{5}}$ f) $\frac{20}{25} = \mathbf{\frac{4}{5}}$

(6)

4.

a) What fraction of this shape is shaded? Give your answer in its simplest form:



$\frac{16}{24} = \mathbf{\frac{2}{3}}$

(2)

5. a) In a test, one student got 15 marks out of 20. Work out what fraction he got right. Simplify your answer fully.

$$\frac{15}{20} = \mathbf{\frac{3}{4}}$$

(2)

b) What percentage did he get right?

$$\frac{3}{4} = \frac{75}{100} = \mathbf{75\%}$$

(1)

5. a) Write 0.05 as a fraction:

$$\frac{0.05}{1} = \frac{5}{100} = \mathbf{\frac{1}{20}}$$

(1)

b) Write 80% as a decimal.

$$\mathbf{0.8}$$

(1)

c) Write $\frac{1}{50}$ as a percentage.

$$\frac{1}{50} = \frac{2}{100} = \mathbf{2\%}$$

(1)

6. a) Work out $\frac{2}{5}$ of $20kg$

$$\frac{1}{5}\ of\ 20 = 4 \Longrightarrow \frac{2}{5} of\ 20 = \mathbf{8kg}$$

(1)

b) Work out $\frac{8}{11} + \frac{4}{33}$

$$\frac{24}{33} + \frac{4}{33} = \mathbf{\frac{28}{33}}$$

(2)

c) Work out $\frac{3}{8} - \frac{1}{6}$

$$\frac{9}{24} - \frac{4}{24} = \mathbf{\frac{5}{24}}$$

(2)