Key stage 2

Mathematics

Paper 2: reasoning

I.   Expand these brackets

    a. $2(8e + 9)$ = …………………………………...

    b. $3(a - 4b)$ = ……………………………………

    c. $7(4 – 2x - y)$ = …………………………………..

II.   Circle the odd one out.

    $6w + 20$ $4(2w + 5)$ $8w + 20$ $6w + 11 + 2w + 9$

10 marks

III.   Circle the letter of the correct answer.

   1. Which is the **largest number** in each group?

      a. 0.28, 0. 38, 2.0

      b. 6.05,   6.5,   6.005

   2. Circle the **smaller measurement** in each pair.

      a.   209 cm   2m

      b.   4.6kg   46g

      c.   3.5L   350mL
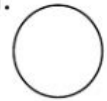
5 marks

IV.   A. Arrange the following measurements from **smallest to greatest**.

1.   1.5m   120cm   12m   _____

2.   4.5kg   5000g,   800g   _____
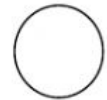
3.   0.5L   250mL   0.6L   _____

(6 marks)

B. Arrange the decimals from **greatest to least**.

1.   1.8   1.08   0.18   _____

2.   0.38   0.56   0.4   _____

3.   2.6   6.2   0.26   _____

(3 marks)

IV. Five children ran a race. Here is the record of their distance.

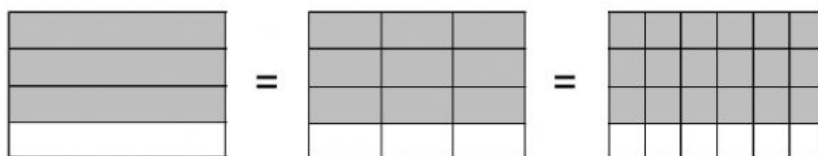| Names	Distance
Sarah	12.46m
Jonna	13.3m
Lorna	12.9m
Fariza	13.08m
Aiza	13.9m

(4 marks)

1. Who ran the race the farthest?   _____

2. Who ran the shortest distance?   _____

3. Who ran 10 meters less than Aiza?   _____

4. Which distances can be rounded to 13? List all _____

V. A. These diagrams show three equivalent fractions.

Write the missing values.

$$\frac{3}{4} \quad = \quad \frac{9}{\boxed{}} \quad = \quad \frac{\boxed{}}{24}$$

◯ 2 marks

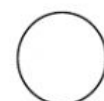B. **Tick 3** fractions that are equivalent to ¼.

☐ $\frac{3}{8}$ ☐ $\frac{4}{16}$

☐ $\frac{2}{8}$ ☐ $\frac{5}{20}$

☐ $\frac{5}{12}$

◯ 3 marks

C. Put a ring around the fraction that simplify to 3/4.
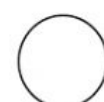
$$\frac{9}{12} \qquad \frac{31}{41} \qquad \frac{6}{10} \qquad \frac{27}{33} \qquad \frac{24}{36}$$
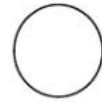
◯ 3 marks

LIVEWORKSHEETS

VI. Fractions

A. Simplify the following fractions.

1. $\dfrac{2}{6}$ = _____

2. $\dfrac{5}{10}$ = _____

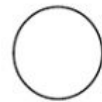3. $\dfrac{4}{12}$ = _____

○ 3 marks

B. Change Mixed fractions to improper fraction

1. $3\dfrac{1}{4}$ = _____

2. $1\dfrac{1}{3}$ = _____
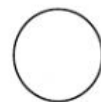
3. $1\dfrac{1}{5}$ = _____

○ 3 marks

C. Change the improper fraction to mixed number.

1. $\dfrac{27}{8}$ = _____

2. $\dfrac{32}{5}$ = _____

3. $\dfrac{18}{7}$ = _____

○ 3 marks

VII. Here are the temperatures in four cities at midnight and at midday.

	Temperature	
City	**At midnight**	**At midday**
Paris	−5 °C	−3 °C
Oslo	−15 °C	−7 °C
Rome	5 °C	11°C
Warsaw	−9 °C	4 °C

( ) 5 marks

Answer the following questions.

1. Which city was 6 degrees colder at midnight than at midday?
___ _____

2. At **midnight**, how many degrees colder was Paris than Rome?
_____

3. What is the lowest temperature recorded? _____

4. By how much did the temperature increase in Warsaw from midnight to midday? _____

5. Which city has the coldest temperature at midday? _____