

Name:

Date:

## Year 6 Reasoning Quiz 3

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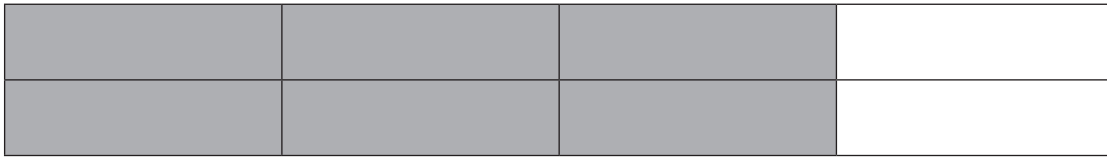
### Equivalent Fractions

1. Write the two missing values to make these equivalent fractions correct.

$$\frac{\boxed{\phantom{000}}}{4} = \frac{9}{12} = \frac{6}{\boxed{\phantom{000}}}$$

.....

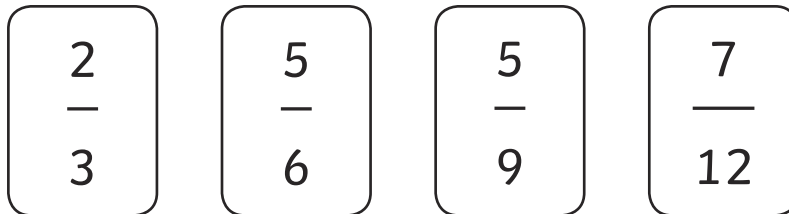
2. Write 2 equivalent fractions that can be represented by this drawing:



\_\_\_\_\_ and \_\_\_\_\_

.....

3. Here are four fraction cards.



Use any three of the cards to make this correct.

$$\boxed{\phantom{000}} < \boxed{\phantom{000}} < \boxed{\phantom{000}}$$

.....

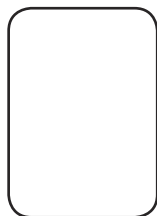
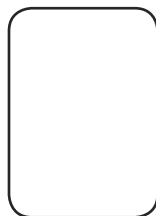
4. Order the following fractions from smallest to largest:

$$\frac{2}{3}$$

$$\frac{7}{4}$$

$$\frac{17}{10}$$

$$\frac{5}{8}$$

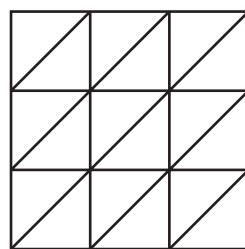
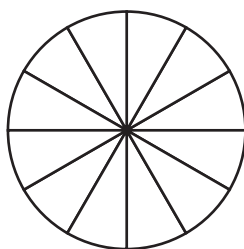
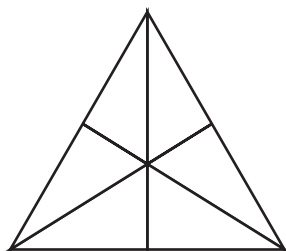


smallest

largest

**Fraction Problems**

5. Shade  $\frac{1}{3}$  of each shape.



6. At the beginning of the day, Hasim counted his money. He gave his brother  $\frac{1}{3}$  of his money. He spent £12 on a present for his sister. He then counted what he had left, and it was half what he had at the beginning of the day. How much did he give his brother? Show your method.


£

## Decimal Number Problems

7. Circle two numbers that add together to equal 0.75.

0.03

0.7

0.72

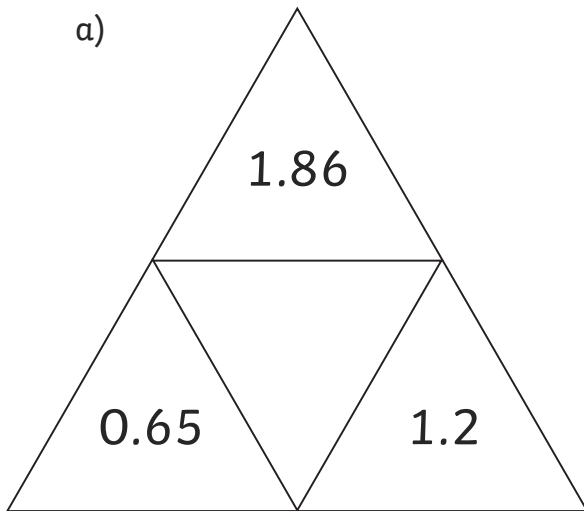
0.07

8. Continue the sequence to put the correct numbers in the unshaded boxes.

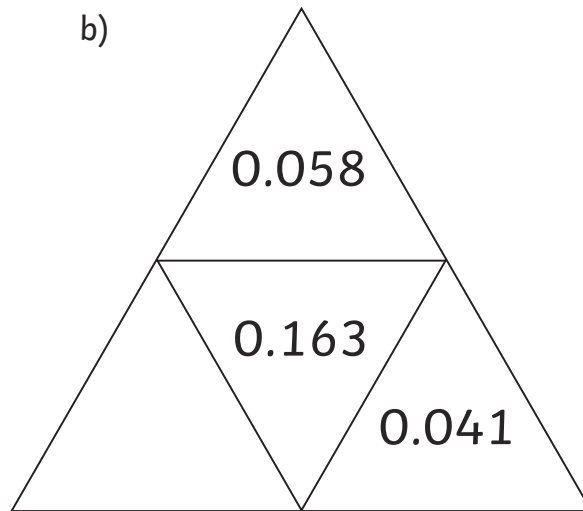
0.04	0.05	0.06	0.07	0.08
0.12	0.13	0.14	0.15	0.16

9. Complete the triangles so that the number in the centre is the sum of the numbers on the outside.

a)



b)

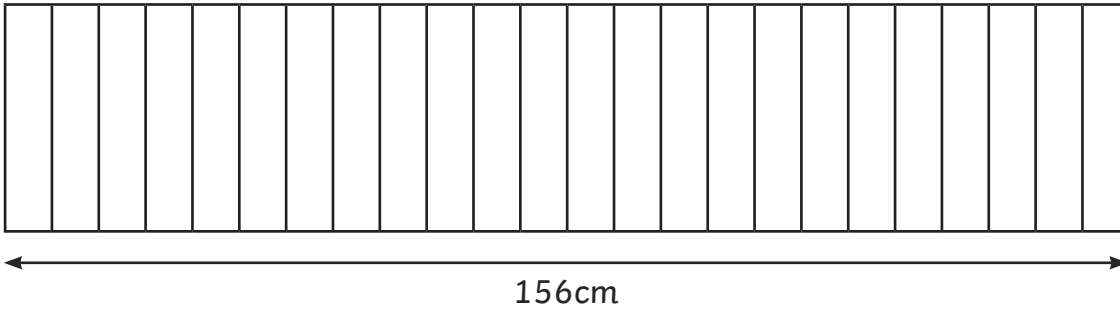


10. Round the following decimal numbers:

	Rounded to nearest	
1.5	whole number	
2.928	tenths	
0.185	hundredth	

**Ratio**

11. 24 identical books are on a shelf



Another four of the same book is added to the shelf.  
 What is the width of the books now?

Show your method.

12. Here are the ingredients needed for raspberry ice cream:

- 4 egg yolks
- 100g sugar
- 300ml cream
- 300ml milk
- 150g raspberries

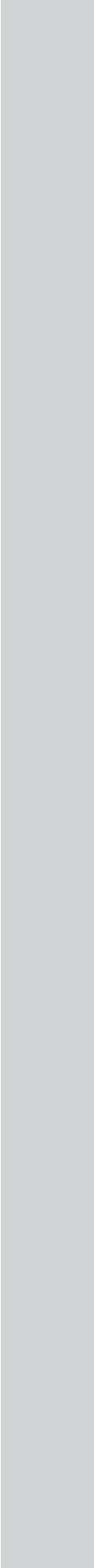
Greg wants to use a box of 6 eggs. What mass of raspberries should he use?

Show your method.


<b>g</b>
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**\*\*END OF TEST\*\***



$$1 \quad \frac{\boxed{3}}{4} = \frac{9}{12} = \frac{6}{\boxed{8}}$$

$$2 \quad \frac{3}{4}, \frac{6}{8}$$

3 Answer will be 3 of the following:

$$\frac{5}{9}, \frac{7}{12}, \frac{2}{3}, \frac{5}{6}$$

$$4 \quad 1 \frac{5}{8}, 1 \frac{2}{3}, \frac{17}{10}, \frac{7}{4}$$

$\xrightarrow{\hspace{10em}}$   
 smallest largest

5 2 parts of the triangle,  
4 parts of the circle,  
6 parts of the square.

6 £24

7 0.03 and 0.72

8 0.28  
0.38  
0.24

9 a) 3.71  
b) 0.064

	Rounded to nearest	
1.5	whole number	2
2.928	tenths	2.9
0.185	hundredth	0.19

11 182cm

12 225g