

Name:

Date:

## Year 6 Reasoning Quiz 3

---

### 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.

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

$$\frac{5}{6}$$

$$\frac{5}{9}$$

$$\frac{7}{12}$$

Use any three of the cards to make this correct.

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



## Decimal Number Problems

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

0.03

0.7

0.72

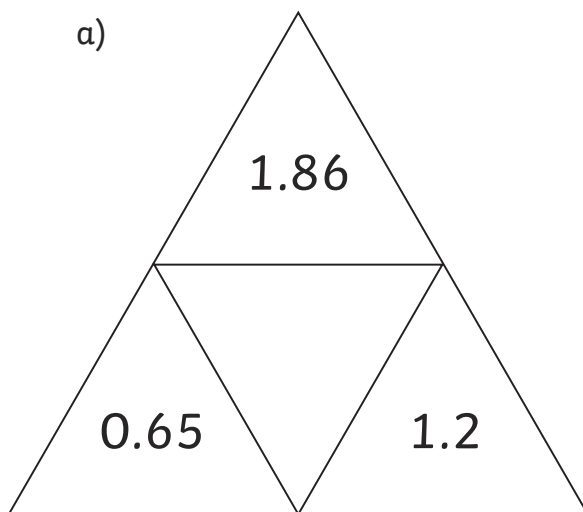
0.07

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

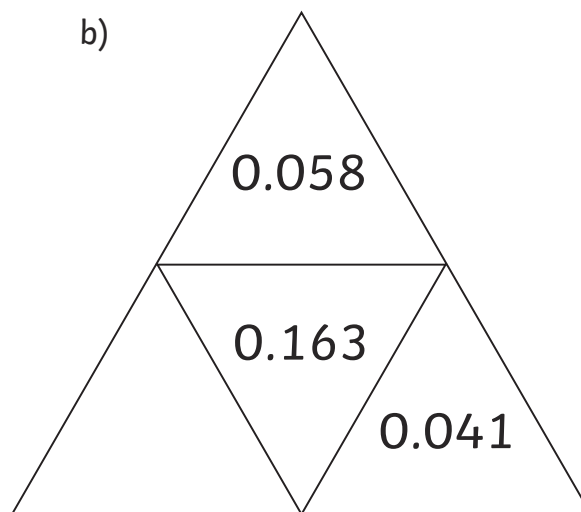
|      |      |      |      |      |
|------|------|------|------|------|
| 0.04 | 0.05 | 0.06 | 0.07 | 0.08 |
| 0.12 | 0.13 | 0.14 | 0.15 | 0.16 |
|      |      |      |      |      |
|      |      |      |      |      |
|      |      |      |      |      |

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

a)



b)

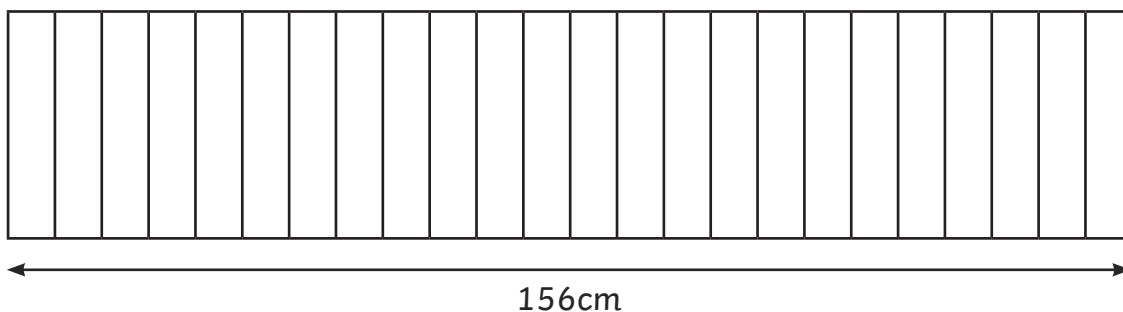


10. Round the following decimal numbers:

|       | 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.



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

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

3 Answer will be 3 of the following:

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

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

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