|  |  |  |  |
| --- | --- | --- | --- |
| Year 7 | | *Fractions* | Non Calculator  Section |
| **Skills and Knowledge Assessed:**   * Compare fractions using equivalence. Locate and represent positive and negative fractions and mixed numbers on a number line (ACMNA152) * Solve problems involving addition and subtraction of fractions, including those with unrelated denominators (ACMNA153) * Multiply and divide fractions and decimals using efficient written strategies and digital technologies (ACMNA154) * Express one quantity as a fraction of another, with and without the use of digital technologies  (ACMNA155) | | | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| *Answer all questions in the spaces provided on this test paper by:*  *Writing the answer in the box provided.*  *or*  *Shading in the bubble for the correct answer from the four choices provided.*  *Show any working out on the test paper. Calculators are* ***not*** *allowed.* | | | |
|  | The fraction of the diagram which is shaded is : | | |
|  | Which pair of fractions below has the same denominator but different numerators? | | |
|  | In which pair below are both of the fractions greater than 1?  and   and   and   and | | |
|  | Some left over tiles are shown.  What fraction of the tiles are white? | | |
|  | Shade  of the shape shown. | | |
|  | Write  as a mixed number. | | |
|  | Write  as an improper fraction. | | |
|  | Simplify the fraction : . | | |
|  | The simplest equivalent fraction to | | |
|  | Which fraction is not equivalent to  ? | | |
|  |  | | |
|  |  | | |
|  | Find  of 36 kg.  kg. | | |
|  | Complete the missing numbers to make pairs of equivalent fractions.  a)  b) | | |
|  | Sonia was asked to write down two pairs of equivalent fractions.  She wrote down: 1st pair :  2nd pair :  Which is true?  Both pairs were correct.  Only the 1st pair was correct.  Only the 2nd pair was correct.  Both pairs were incorrect. | | |
|  | Write one of the symbols <, > or = in the boxes below to make true sentences.  a)  b) | | |
|  | What fraction is 24 cm of 60 cm? (Answer in simplest form). | | |
|  | Mark the position of  on the number line below. | | |
|  | Mark the position of  on the number line below. | | |
|  | Which equation is correct? | | |
|  | Find the answer to the addition, giving your answer in simplest form; | | |
|  | Complete, giving your answer in simplest form; | | |
|  | What is the answer to  in simplest form; | | |
|  | Complete, giving your answer in simplest form; | | |
|  |  | | |
|  | Simplify | | |
|  | Simplify | | |
|  |  | | |
|  | Complete, giving your answer in simplest form; | | |
|  | What fraction is 45 seconds of  minutes? (Answer in simplest form). | | |
|  | Rewrite the numbers  in ascending order. | | |
|  | Write the reciprocal of these numbers.  a)  b) | | |
|  |  | | |
|  | Simplify | | |
|  |  | | |
|  | Simplify | | |

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Year  7 | | *Fractions* | Non Calculator  Longer Answer  Section | | |
|  | | | Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | |
| Write all working and answers in the spaces provided on this test paper. | | | | | |
|  | | | | **Marks** |
| 1. The fraction wall below shows several equivalent fractions. | | | |  |
|  | 1. The fractions  are shaded on the wall.   Shade the fractions | | | **2** |
|  | 1. Write two other fractions which are equivalent to   ……………………………………………………………………………………. | | | **1** |
|  | 1. What is the value of   ……………………………………………………………………………………. | | | **1** |
|  | 1. What is the value of   ……………………………………………………………………………………. | | | **1** |
| 2. | Lisa has 36 pieces of jewellery in her case.  One third of the pieces are necklaces,  of them are bracelets,  are earrings and the rest are rings. | | |  |
|  | 1. How many necklaces does she have?   ………………………………………..……………………………………………………………………………………  …………………………………………………………………….……………………………………………………… | | | **1** |
|  | 1. How many pieces are bracelets?   ………………………………………..……………………………………………………………………………………  …………………………………………………………………….……………………………………………………… | | | **1** |
|  | 1. How many rings are there?   ………………………………………..……………………………………………………………………………………  …………………………………………………………………….……………………………………………………… | | | **1** |

Fractions

ANSWERS

|  |
| --- |
| Non Calculator Section ( 1 mark each) |

|  |  |
| --- | --- |
| Q no | Working and Answer |
|  | 3 out of 5 so  (3rd Answer) |
|  | (3rd Answer) |
|  | and  (3rd Answer) |
|  | 3 out of 10 so  (1st Answer) |
|  | Any 12 shaded, e.g: |
|  | (3rd Answer) |
|  |  |
|  |  |
|  | (2nd Answer) |
|  | (2nd Answer) |
|  |  |
|  |  |
|  |  |
|  | a)  b) |
|  | 1st pair :  2nd pair :  Both are correct (1st Answer) |
|  | a)  b) |
|  |  |
|  |  |
|  |  |
|  | ( 1st Answer) |
|  |  |
|  |  |
|  | ( 3rd Answer) |
|  |  |
|  | ( 1st Answer) |
|  |  |
|  | ( 4th Answer) |
|  | ( 1st Answer) |
|  |  |
|  |  |
|  |  |
|  | a)  b) |
|  |  |
|  |  |
|  | (2nd Answer) |
|  |  |

|  |
| --- |
| Longer Answer Section Answers |

|  |  |  |
| --- | --- | --- |
| Q no |  | |
|  | 1 for each | |
|  | b) | 1 |
|  | c) | 1 |
|  | d) | 1 |
|  | a) | 1 |
|  | b) | 1 |
|  | c) | 1 |