|  |  |  |  |
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| Year 8 | | *Rational Numbers* | Non Calculator  Section |
| **Skills and Knowledge Assessed:**   * Connect fractions, decimals and percentages and carry out simple conversions (ACMNA157) * Carry out the four operations with rational numbers and integers, using efficient mental and written strategies and appropriate digital technologies (ACMNA183) * Investigate terminating and recurring decimals (ACMNA18 | | | 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.* | | | |
|  | What is the simplest form of the fraction | | |
|  |  | | |
|  |  | | |
|  | Some buttons are shown.  What fraction of the buttons are coloured? | | |
|  | What is the value of 0.45 – 0.21? | | |
|  | What fraction is equivalent to 0.36? (Answer in simplest form.) | | |
|  |  | | |
|  | What is the sum of | | |
|  |  | | |
|  |  | | |
|  | What is the value of 0.8 + 0.19 + 2.3? | | |
|  |  | | |
|  | Write  as a decimal. | | |
|  | What is 45% of $280.00? | | |
|  | Luke spends 60 minutes playing out of the 400 minutes he spends at school.  What percentage of the time does he spend playing? | | |
|  | Decrease $160 by 60%. | | |
|  | Rewrite the following numbers in the spaces provided, in ascending order. | | |
|  | A recurring decimal is written as  The decimal could also be written as:  0.806806806… 0.806060606…. 0.80666666… 0.806 | | |
|  | What fraction is halfway between | | |
|  | 0.002 04 0.020 4 0.204 2.04 | | |

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| Year 8 | | *Rational Numbers* | Calculator Allowed  Short Answer  Section |
|  | | | 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 allowed.* | | | |
|  | Which fraction is equivalent to | | |
|  | Complete the improper fraction: | | |
|  | Complete the equivalent fraction: | | |
|  | What is the value of 0.65 + 0.34? | | |
|  | What fraction is equivalent to 45%? (Answer in simplest form.) | | |
|  |  | | |
|  | Shade  of the shape shown. | | |
|  | What is the value of the 7 digit in the number 35.267?  Units Tenths Hundredths Thousandths | | |
|  | Which number is the largest?  0.035 0.35 0.305 0.053 | | |
|  | When 2.947 is rounded to the nearest hundredth, the result is:  2.9 3.0 2.94 2.95 | | |
|  | Which fraction is equal to | | |
|  | Peter counts his T shirts and finds that 40% of them are red.  If he owns 65 T shirts, how many are red? | | |
|  | Find  of 128 kg. | | |
|  | When 3.45 is subtracted from 5.725, the result is | | |
|  | Which of the points represent the position of 0.024 on the number line?    Point *A* Point *B* Point *C* Point *D* | | |
|  | Which decimal is equal to  ? | | |
|  | Mrs Ford asks four of her students; *“What part of an hour is 40 minutes?”*  Which of the answers below is incorrect?  “It is 40% of an hour.” “It is 0.65 of an hour.”  “It is  of an hour.” “It is  of an hour.” | | |
|  | When running, Polly takes 1.24 breaths every second.  How many breaths does she take in foot race that lasts for 1.6 minutes?  2 breaths 20 breaths 119 breaths 120 breaths | | |
|  | Paul puts 32% of the money he earns for working on Saturday into the bank.  Paul put $38.40 into the bank.  How much did he earn on Saturday? | | |
|  | Jana fills the tank of her SUV with fuel before setting out on a day’s travel.  The fuel is costs 152.9 cents per litre and she puts 72.5 litres of fuel in the tank.  What is the cost (in dollars, to the nearest 5 cents) of the fuel? | | |

Rational Numbers

ANSWERS

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

|  |  |  |
| --- | --- | --- |
| Q no |  | Answer |
|  |  | 2nd Answer |
|  |  |  |
|  |  |  |
|  |  | 4th Answer |
|  | 0.45 – 0.21 = 0.24 |  |
|  |  |  |
|  |  | 3rd Answer |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | 3rd Answer |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  | 1st Answer |
|  |  |  |
|  |  | 3rd Answer |

|  |
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| Calculator Allowed Short Answer Section ( 1 mark each) |

|  |  |  |
| --- | --- | --- |
| Q no |  | Answer |
|  |  | 4th Answer |
|  |  |  |
|  |  |  |
|  | 0.65 + 0.34 = 0.99 |  |
|  |  |  |
|  |  | 2nd Answer |
|  | Any ten shaded. |  |
|  | 3rd place after the point is Thousandths | 4th Answer |
|  | 0.35 is largest | 2nd Answer |
|  | 2.947 = 2.95 to nearest hundredth | 4th Answer |
|  |  |  |
|  |  |  |
|  | of 128 = |  |
|  | (using calculator) |  |
|  | Point B | 2nd Answer |
|  |  | 2nd Answer |
|  |  | 4th Answer |
|  |  | 3rd Answer |
|  |  |  |
|  |  |  |