**TERM 2: COMMON FRACTIONS**

**Exercise 1**

1. Answer the following questions.

For example: $\frac{2}{3}$ of 12 = (12 ÷ 3) × 2 = 8

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| a. $\frac{1}{5}$ of 10 = \_\_\_\_\_\_\_\_\_\_ | b. $\frac{3}{7}$ of 14 = \_\_\_\_\_\_\_\_\_\_ |
| c. $\frac{4}{8}$ of 16 = ­\_\_\_\_\_\_\_\_\_\_ | d. $\frac{5}{9}$ of 18 = \_\_\_\_\_\_\_\_\_\_ |

2. Order these fractions from smallest to biggest [**since their denominators are the same, order them from the smallest numerator to the biggest**].

For example: $\frac{3}{4}$; $\frac{1}{4}$; $\frac{4}{4}$; $\frac{2}{4}$ = $\frac{1}{4}$; $\frac{2}{4}$, $\frac{3}{4}$; $\frac{4}{4}$

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| a. $\frac{4}{5}$; $\frac{1}{5}$; $\frac{3}{5}$; $\frac{2}{5}$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | b. $\frac{6}{8}$; $\frac{2}{8}$; $\frac{4}{8}$; $\frac{3}{8}$; $\frac{7}{8}$; $\frac{5}{8}$; $\frac{1}{8}$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

3. Count forward in fractions.

For example: 1 + $\frac{1}{2}$ 1$\frac{1}{2}$ + $\frac{1}{2}$ 2 …

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| a. Count in thirds, from $\frac{1}{3}$ to $3\frac{2}{3}$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | b. Count in fifths from $\frac{2}{5}$ to $3\frac{3}{5}$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

4. Count backwards in fractions.

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| a. Count in sixths, from $2\frac{5}{6}$ to $\frac{1}{6}$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | b. Count in sevenths, from $2\frac{6}{7}$ to $\frac{2}{7}$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

5. Replace \* with <; > or =.

Use the **Fraction Chart** below.



a. $\frac{1}{5}$ \* $\frac{1}{4}$ \_\_\_\_\_ b. $\frac{2}{3}$ \* $\frac{3}{5}$ \_\_\_\_\_ c. $\frac{3}{8}$ \* $\frac{5}{6}$ \_\_\_\_\_ d. $\frac{9}{12}$ \* $\frac{1}{2}$ \_\_\_\_\_ e. $\frac{2}{10}$ \* $\frac{1}{5}$ \_\_\_\_\_ f. $\frac{2}{11}$ \* $\frac{8}{9}$ \_\_\_\_\_

6. Order the following fractions from biggest to smallest [Use the **Fraction Chart**].

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| a. $\frac{1}{5}$; $\frac{1}{3}$; $\frac{1}{10}$; $\frac{1}{7}$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | b. $\frac{2}{8}$; $\frac{4}{5}$; $\frac{6}{7}$; $\frac{1}{2}$; $\frac{2}{3}$\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**Exercise 2**

Adding and subtracting common fractions with the same denominators

1. Add the following fractions [**add their numerators, keep their denominator**].

For example: $\frac{2}{6}$ + $\frac{3}{6}$ = $\frac{5}{6}$

a. $\frac{1}{4}$ + $\frac{2}{4}$ = \_\_\_\_\_ b. $\frac{5}{10}$ + $\frac{2}{10}$ = \_\_\_\_\_ c. $\frac{1}{9}$ + $\frac{4}{9}$ + $\frac{2}{9}$ = \_\_\_\_\_ d. $\frac{5}{11}$ + $\frac{2}{11}$ + $\frac{1}{11}$ = \_\_\_\_\_

2. Subtract the following fractions**[subtract their numerators, keep their denominator**].

For example: $\frac{3}{5}$ - $\frac{2}{5}$ = $\frac{1}{5}$

a.$\frac{3}{4}$ - $\frac{2}{4}$ = \_\_\_\_\_ b. $\frac{9}{10}$ - $\frac{5}{10}$ = \_\_\_\_\_ c. $\frac{7}{8}$- $\frac{1}{8}$ - $\frac{2}{8}$ = \_\_\_\_\_ b. $\frac{6}{10}$ - $\frac{3}{10}$ - $\frac{2}{10}$ = \_\_\_\_\_

**Exercise 3**

1. Read the following and write down the fraction.

a. Wandile shared his marbles equally between 7 of his friends. What fraction of marbles did each one get?

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b. Nkosi went to the aquarium for 6 out of the 10 days of holidays. What fraction of his time did he spend there?

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c. Amanda wrote 5 out of the 7 pages for Social Science project on Monday. What fraction of her project has she done?

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**Exercise 4**

Solve the word problems.

a. Jono used $\frac{1}{4}$ of his pocket money for sweets and used $\frac{2}{4}$ of his pocket money to buy a present for his grandmother. What fraction of his pocket money did he use altogether?

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b. Sally spent $\frac{1}{5}$ of her day swimming and cycling and the other $\frac{2}{5}$ of her day running. What fraction of her day did she spend exercising?

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c. Of the animals Tryllin saw in the game reserve, $\frac{5}{10}$ were impala, $\frac{2}{10}$ were elephants and $\frac{1}{10}$ were lions. What fraction was this of all the animals he saw?

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d. A school decides to spend $\frac{5}{12}$ of the money collected at their school Walk-a-thon on books and $\frac{4}{12}$ of the money on sports equipment. What fraction altogether was spent buying books and sport equipment?

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e. What fraction of the Walk-a-thon money was left over?

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**Exercise 5**

**Equivalent Fractions – are fractions that have the same value.**

For example$: \frac{1}{2}$ =$\frac{2}{4}$ =$\frac{4}{8}$ =$\frac{5}{10}$ =$\frac{20}{40}$ =$\frac{50}{100}$ =$\frac{500}{1000}$ =$\frac{1000}{2000}$

1. Work out the equivalent forms for the following fractions by either multiplying or diving.

Example 1: $\frac{2}{3}$ = $\frac{6}{a}$

a = [6 ÷ 2] × 3 = 9 or$\frac{2 ×3}{3 ×3}$ = $\frac{6}{9}$

Therefore: $\frac{2}{3}$ = $\frac{6}{9}$

Example 2: $\frac{10}{20}$ = $\frac{5}{b}$

 b = 10 ÷ 5 = **2**or $\frac{10 ÷ 2}{20 ÷2}$ = $\frac{5}{10}$

 = 20 ÷ **2** = 10

Therefore: $\frac{10}{20}$ = $\frac{5}{10}$

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| $\frac{1}{2}$ = $\frac{a}{10}$*a* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | $\frac{b}{20 }$ = $\frac{3}{5}$*b* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | $\frac{3}{8}$ = $\frac{9}{c}$*c* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| d. $\frac{4}{d}$ = $\frac{2}{3}$*d* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | $\frac{5}{6}$ = $\frac{e}{24}$*e* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | $\frac{32}{40}$ = $\frac{4}{f}$*f* = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |

**REFERENCE**

Barichievy M. and Pieterse K. (2012).*Grade 5Shuters Premier Mathematics Learner’s Book*. Shuter and Shooter.