Name: Solutions Date: _____

Class: _____

Baldivis Secondary College

Year 7 Mathematics

Mini-Test 4, 2018

Topic - Fractions

/ 26

%

Total Time: 30 min
Weighting: 5 %
Equipment: *Page of notes (NO CALCULATOR)*

Question 1 **5 marks**

Match the definition on the left-hand side with the correct word on the right-hand side by drawing a line between each one:

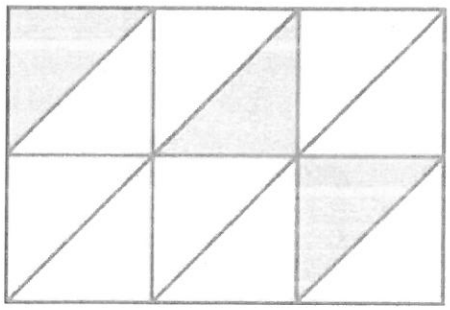
A fraction where the numerator is equal to, or larger than the denominator.	Improper fraction
A fraction consisting of a whole number and a proper fraction.	Denominator
The top number in a fraction. It shows how many parts we have.	Proper Fraction
A fraction where the numerator is smaller than the denominator.	Mixed Number
The bottom number in a fraction. It shows how many equal parts the item is divided into.	Numerator

Question 2 **1 mark**

What fraction of this shape is shaded? Put the answer in its simplest form.

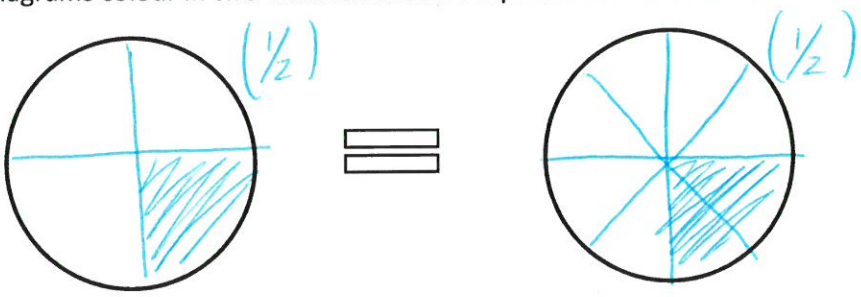
$\frac{3}{12} = \frac{1}{4}$

$(\frac{1}{2})$ $(\frac{1}{2})$



Question 3 **1 mark**

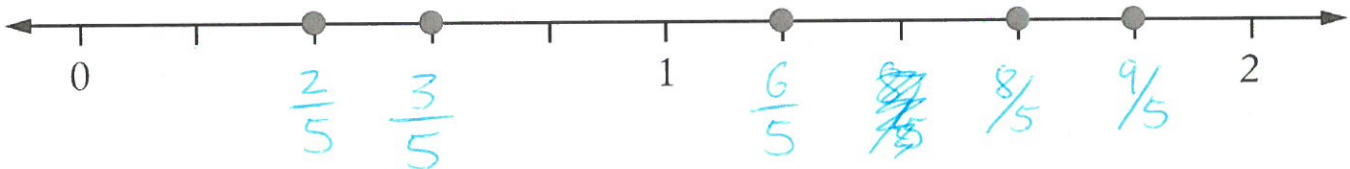
Using the following diagrams colour in two fractions that are equivalent to each other.



Any answer

Question 4 **8 marks**

a) Write the fractions marked by a dot on the number line:



$\frac{2}{5}$ $\frac{3}{5}$ $\frac{6}{5}$ $\frac{8}{5}$ $\frac{9}{5}$

$1\frac{1}{5}$ $1\frac{3}{5}$ $1\frac{4}{5}$

b) Write the following fractions from smallest to largest:

$\frac{2}{5}$ $\frac{3}{10}$ $\frac{3}{5}$ $\frac{4}{20}$

0.4 0.3 0.6 0.2

$\frac{4}{20}$, $\frac{3}{10}$, $\frac{2}{5}$, $\frac{3}{5}$

Question 5 **11 marks**

Evaluate the following. **Make sure to leave all answers as proper or mixed fractions. If possible, simplify your answer.**

(½) (½)

✓ a) Find the sum of $\frac{2}{3}$ and $\frac{2}{3}$ $= \frac{4}{3} = 1\frac{1}{3}$

✓ b) Find the difference between $\frac{5}{8}$ and $\frac{3}{8}$

$\frac{2}{8} = \frac{1}{4}$

✓ c) $\frac{1}{4} + \frac{2}{3}$ $\frac{3}{12} + \frac{8}{12} = \frac{11}{12}$

✓ d) $\frac{5}{6} - \frac{3}{12}$ $\frac{10}{12} - \frac{3}{12} = \frac{7}{12}$

(½) (½)

✓ e) $2\frac{3}{5} + \frac{4}{5}$ $\frac{13}{5} + \frac{4}{5} = \frac{17}{5} = 3\frac{2}{5}$

✓✓ f) $\frac{2}{3} + \frac{1}{4} - \frac{2}{5}$ $\frac{40}{60} + \frac{15}{60} - \frac{24}{60}$ ✓

$\frac{55}{60} - \frac{24}{60} = \frac{31}{60}$ ✓

✓ g) $\frac{2}{5} \times \frac{4}{7} = \frac{8}{35}$

✓ h) $\frac{1}{2} \div \frac{5}{8}$

$\frac{1}{2} \times \frac{8}{5} = \frac{8}{10} = \frac{4}{5}$

(½) (½)

✓✓ i) $7\frac{1}{2} \div 5\frac{5}{6}$ $\frac{15}{7} \times \frac{6}{36} = \frac{90}{252} = \frac{5}{14}$ ✓

(½) (½)