Year 8 Fractions Test Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Multiple Choice: Circle the correct answer** 18 marks

1. Which is the correct set of words for 

A. Twenty – three tenths

B. Twenty – three hundredths

C. One hundred and twenty-three tenths

D. Twenty-three thousandths

1. Which pair of fractions below has the same numerator but different denominators?

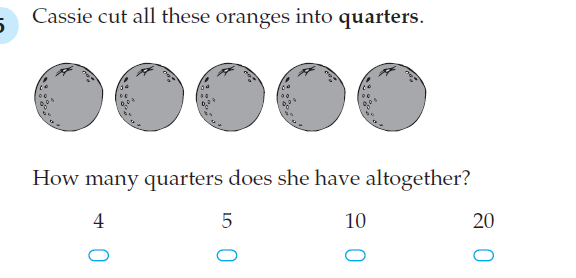
A  B  C  D 

1. Which triangle does NOT have exactly half shaded

A. B. C. D.

1. Mick cut all these oranges into quarters. How many quarters did he end up having?

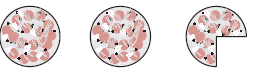


A. 4 B. 5 C. 10 D. 20

1. Which fraction has a different value?

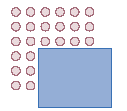
A. B.  C. D. 

1. How many pizzas are shown?



A.  B.  C.  D. 

1. The circles are in a regular square pattern. Some of the circles are hidden by the card. What fraction of the circles is hidden?



A.  B.  C.  D. 

1. hours = ? minutes

A. 200 B. 210 C. 303 D. 320

1. What is  of $80?

A. $8 B. $10 C. $24 D. $30

1. Which set of numbers is in ascending order?

A  B  C  D 

1. Chose the fraction which represents the largest amount:

A  B  C  D 



1. The fraction of the diagram which is shaded is :

A  B  C  D 

1. How many different fractions are there between and?

A None B One C A few D Lots

1. The  is equal to

A.  B.  C.  D. 

1. The following form a number pattern  what is the next number in the sequence?

A.  B.  C.  D. 

1. A computer game was priced at $40. Its price has been reduced by a quarter. What is its price now?

A. $15 B. $30 C. $36 D. $40

1. Georgia spent an hour playing netball and of an hour playing soccer. How long in total did she spend playing the two sports?

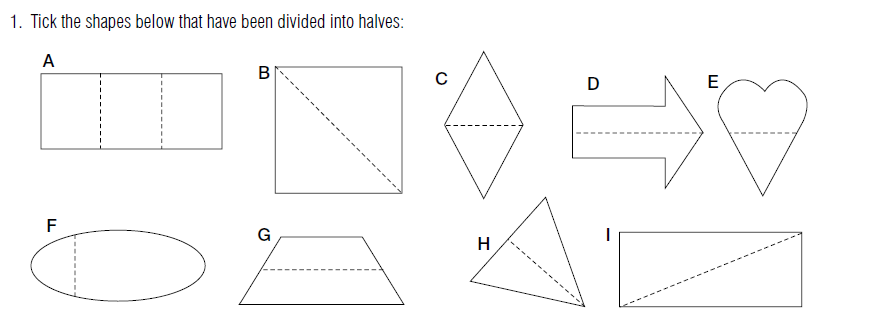
A. 1 hour B.  hours C. hours D. 2 hours

1. Find =

A.  B.  C.  D. 

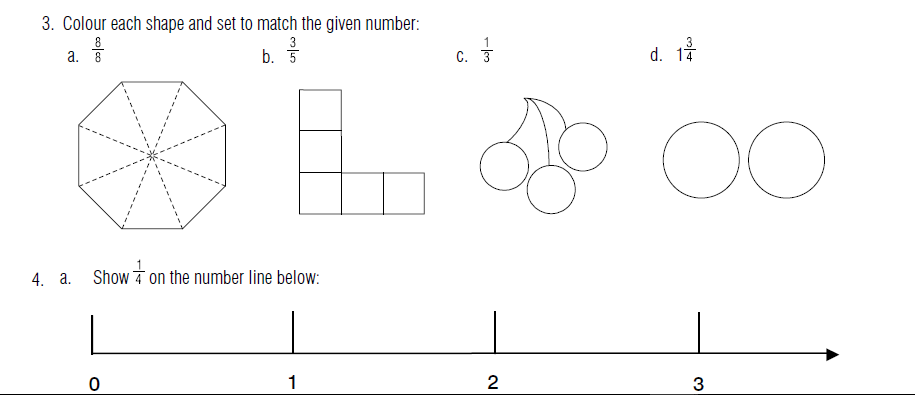
Part A: Conceptual Understanding 8 marks

1. Circle the shapes that have been divided in halves:

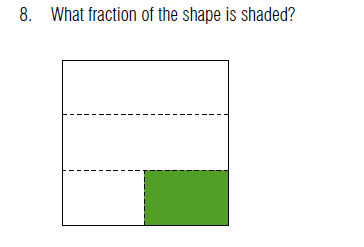


1. Shade each shape to match the fraction given:

a. b. c. d.



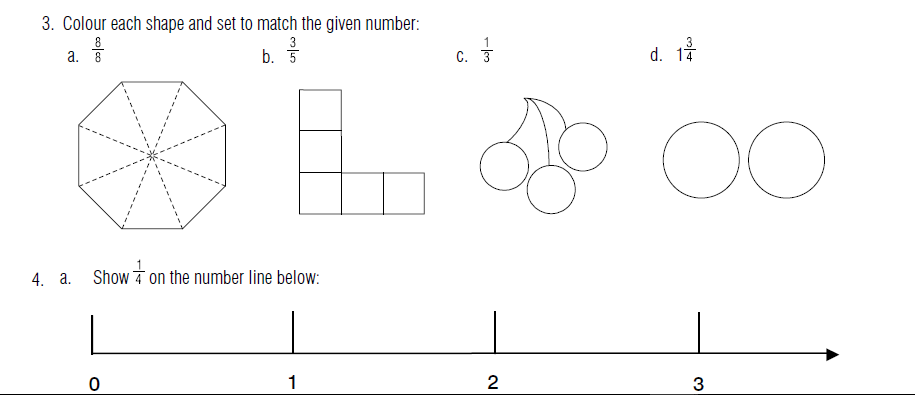
1. What fraction of the shape is shaded? \_\_\_\_\_\_\_\_\_\_\_\_\_

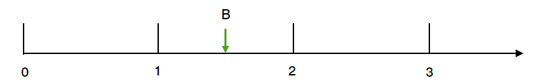
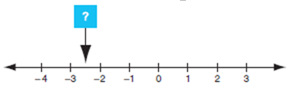


1. This is half a ribbon, draw a whole ribbon. 
2. This is  of a ribbon, draw a whole ribbon. 
3. There are 2 chocolate bars to share among Paige, Jess and Jade. Partition the chocolate bars below to show how much each girl gets? 
4. This  is  of a set of marbles. Draw the whole set of marbles.
5. This  is  of a set of marbles. Draw the whole set of marbles.

Part B: Number Lines 7 marks

1. Show 1 on the number line.



1. What number could be shown at B on the number line below? \_\_\_\_\_\_\_
2. Write a number that is between and 1. \_\_\_\_\_\_\_\_\_\_
3. Is closer to 0 or 1 ? \_\_\_\_\_\_\_\_\_\_
4. Round to the nearest whole number. \_\_\_\_\_\_\_\_\_\_
5. Round to the nearest whole number. \_\_\_\_\_\_\_\_\_\_
6. What number does the arrow point to on the number line? \_\_\_\_\_\_\_\_\_ 

Part C: Operations working space

1. Fill in the missing numbers
   1. 
   2. 
   3. 
2. Simplify 12 fifths \_\_\_\_\_\_\_\_\_\_\_
3. Simplify  -  \_\_\_\_\_\_\_\_\_\_\_\_\_
4. Simplify  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
5. Find  of 21 \_\_\_\_\_\_\_\_\_\_\_\_\_
6. Simplify 3  + 1 \_\_\_\_\_\_\_\_\_\_\_\_
7. Simplify 1 - 3 \_\_\_\_\_\_\_\_\_\_\_\_
8. Simplify  ÷  \_\_\_\_\_\_\_\_\_\_\_\_
9. Simplify 2÷ 1 \_\_\_\_\_\_\_\_\_\_\_\_\_
10. How many thirds in 5? \_\_\_\_\_\_\_\_\_\_\_\_\_
11. Find 1 x 2 \_\_\_\_\_\_\_\_\_\_\_\_\_
12. Simplify  \_\_\_\_\_\_\_\_\_\_\_\_\_

Part D: Applications

1. 10c is what fraction of $1?
2. 33 is  , what is a whole?
3. Brodie uses 15 litres of water every minute when he has a shower. He uses 100 litres of water when he has a bath. How many litres of water does he save by having a  minute shower?
4. When a kettle is full of water it has a mass of 2900 grams. When the kettle is half full of water is has a mass of 2050 grams. What is the mass of the kettle when it is empty?
5. An amount is increased by a quarter of the original amount. The result is 125. What was the original amount?
6. The Tigers have had a miracle and increased their previous goal total by two thirds. Their new total is 25 goals. How many goals did they increase by?
7. A ticket to watch the wonderful Sydney Swans for one adult costs $24. A ticket for a school student is three quarters of the cost of an adult. Because I am a swanderful teacher I buy tickets for 3 students as well as myself, how much change would I get from $100?