

Craigmount High School



Numeracy Questions

Name: _____

Number and Number Processes

		Red	Amber	Green
3-03a	I can use a variety of methods to solve number problems in familiar contexts, clearly communicating my processes and solutions.			
3-03b	I can continue to recall number facts quickly and use them accurately when making calculations.			

<u>Adding</u>	<u>Subtracting</u>
2.4 + 3.3	7.4 - 3.3
12.7 + 2.8	15.7 - 2.8
6.72 + 5.49	6.79 - 5.42
245.987 + 16.204	45.53 - 16.69
34.69 + 72.507	94.609 - 72.517

<u>Multiplying</u>	<u>Dividing</u>
2.4 x 3	2.4 ÷ 3
12.7 x 5	12.5 ÷ 5
6.72 x 10	68.5 ÷ 10
24 x 62	12.4 ÷ 3
48 x 59	4.8 ÷ 4

- Find the number that is:
 - 40 before 9099
 - 501 before 1 000
- Alan owns a restaurant. He orders nine boxes of paper napkins. If each box holds 179 napkins, how many napkins has he ordered in total?
- Write down the answer to the following
 - 23 x 100
 - 102 x 10
 - 29 x 1000
 - 35000 ÷ 1000
 - 120000 ÷ 100
 - 4040400 ÷ 100

Rounding

		Red	Amber	Green
3-01a	I can round a number using an appropriate degree of accuracy, having taken into account the context of the problem			

Complete the following table:

	Nearest 100	Nearest 10	Nearest whole number	One decimal place	Two decimal places
542.326					
1540.0798					
145.367					
1002.41257					
10355.456					
1231.978					

Multiples and Factors

		Red	Amber	Green
3-05a	I have investigated strategies for identifying common multiples and common factors, explaining my ideas to others and can apply my understanding to solve related problems.			

- Write down the first 6 multiples of the following starting with the given number:
 - 5
 - 10
 - 9
 - 11
- Make a list of:
 - The multiples of 6 between 20 and 50
 - The multiples of 7 between 50 and 100
 - The multiples of 13 between 25 and 60
- Find the **lowest common multiple** of the following pairs of numbers
 - 5 and 4
 - 3 and 7
 - 10 and 11
 - 2, 3 and 6
 - 8 and 12
 - 4 and 6

4. At school dance competition, the pupils in red clap every 2 seconds, the pupils in green every 3 seconds and the pupils in blue every 6 seconds.
At a certain time they will all clap together, when is this?
5. List **all** the factors of the following numbers:
 (a) 30
 (b) 56
 (c) 45
 (d) 108
 (e) 64
6. State **true** or **false** for the following statements:
 (a) 11 is a factor of 121
 (b) 3 is a factor of 72
 (c) 8 is a factor of 60
 (d) 7 is a factor of 125
7. Find the **highest common factor** of the following:
 (a) 8 and 12
 (b) 120 and 12
 (c) 21 and 28
 (d) 20 and 24
 (e) 32 and 48
 (f) 18, 45 and 63

Fractions, Decimals and Percentages

		Red	Amber	Green
2-07b	I can show the equivalent forms of simple fractions, decimal fractions and percentages.			
3-07a	I can solve problems by carrying out calculations with a wide range of fractions, decimal fractions and percentages, using my answers to make comparisons and informed choices for real life situations.			
3-07b	By applying my knowledge of equivalent fractions and common multiples, I can add and subtract commonly used fractions.			

Simplify the following fractions:

1. $\frac{2}{4}$

2. $\frac{35}{40}$

3. $\frac{3}{6}$

4. $\frac{18}{20}$

5. $\frac{4}{36}$

6. $\frac{5}{35}$

7. $\frac{3}{30}$

8. $\frac{44}{48}$

9. $\frac{2}{4}$

10. $\frac{10}{45}$

11. $\frac{6}{14}$

12. $\frac{4}{28}$

13. $\frac{5}{15}$

14. $\frac{4}{32}$

15. $\frac{25}{60}$

Complete the following addition and subtraction calculations:

1. $\frac{5}{8} + \frac{1}{8} = \frac{\quad}{8}$

5. $\frac{4}{8} - \frac{1}{8} = \frac{\quad}{8}$

2. $\frac{3}{10} + \frac{3}{10} = \frac{\quad}{10}$

6. $\frac{3}{12} - \frac{1}{12} = \frac{\quad}{12}$

3. $\frac{2}{9} + \frac{4}{9} = \frac{\quad}{9}$

7. $\frac{7}{9} - \frac{4}{9} = \frac{\quad}{9}$

4. $\frac{3}{16} + \frac{5}{16} = \frac{\quad}{16}$

8. $\frac{11}{16} - \frac{5}{16} = \frac{\quad}{16}$

9. $\frac{1}{2} + \frac{7}{14} = \frac{\quad}{14} + \frac{7}{14} = \frac{\quad}{\quad}$ 14. $\frac{1}{2} - \frac{3}{14} = \frac{\quad}{14} - \frac{3}{14} = \frac{\quad}{\quad}$

10. $\frac{1}{3} + \frac{1}{6} = \frac{\quad}{6} + \frac{1}{6} = \frac{\quad}{\quad}$ 15. $\frac{2}{3} - \frac{1}{6} = \frac{\quad}{6} - \frac{1}{6} = \frac{\quad}{\quad}$

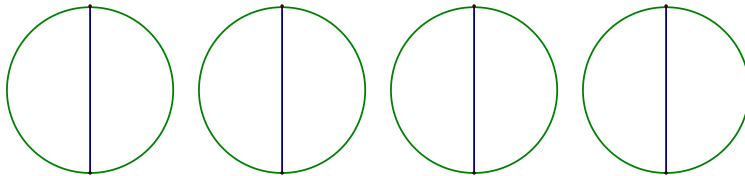
11. $\frac{3}{8} + \frac{1}{4} = \frac{3}{8} + \frac{\quad}{8} = \frac{\quad}{\quad}$ 16. $\frac{7}{8} - \frac{1}{4} = \frac{7}{8} - \frac{\quad}{8} = \frac{\quad}{\quad}$

12. $\frac{2}{7} + \frac{3}{14} = \frac{\quad}{14} + \frac{3}{14} = \frac{\quad}{\quad}$ 17. $\frac{9}{10} - \frac{3}{5} = \frac{\quad}{10} - \frac{6}{10} = \frac{\quad}{\quad}$

13. $\frac{1}{5} + \frac{2}{10} = \frac{\quad}{10} + \frac{2}{10} = \frac{\quad}{\quad}$ 18. $\frac{1}{4} - \frac{1}{12} = \frac{\quad}{12} - \frac{1}{12} = \frac{\quad}{\quad}$

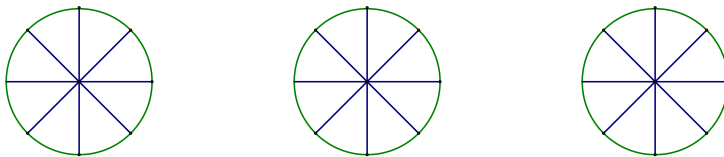
		Red	Amber	Green
3-07c	Having used practical, pictorial and written methods to develop my understanding. I can convert between whole or mixed numbers and fractions.			

1. Shade in the fraction $\frac{7}{2}$



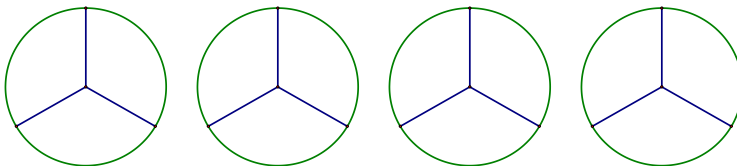
$\frac{7}{2}$ is the same as _____.

2. Shade in the fraction $\frac{17}{8}$



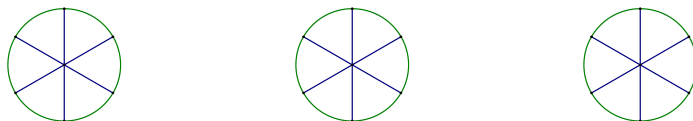
$\frac{17}{8}$ is the same as _____.

3. Shade in the fraction $\frac{8}{3}$



$\frac{8}{3}$ is the same as _____.

4. Shade in the fraction $\frac{10}{6}$



$\frac{10}{6}$ is the same as _____.