Steady Steps Maths

FREE UNIT TEST · TOPIC 5

FREE SAMPLE · UNIT TEST A

Adding & Subtracting Fractions

Unit Test A · 40 marks · about 40 minutes

GRADE 5



Common Core 5.NF.A.1–2

Licensed for use by one family. Please do not share, upload or resell.

Name _____ Date _____

UNIT TEST A Adding & Subtracting Fractions

40 marks · about 40 minutes · Common Core 5.NF.A.1–2

Name _____ **Date** _____

Instructions

- Answer **every** question in the space given.
- Show your working: in Sections B and C you get marks for your method, even if the final answer is wrong.
- The number in brackets, like [2], shows how many marks a question is worth.
- You have about 40 minutes. A calculator is **not** needed.
- Check your answers if you finish early.

Your score

Section	Questions	Marks	Your score
A · Quick questions	1–10	10	
B · Show your working	11–16	17	
C · Problem solving	17–18	13	
Total		**40**	

Percentage: _____ % 85%+ excellent · 65–84% good · 45–64% keep practising · below 45% revise the packs first

Licensed for use by one family. Please do not share, upload or resell.

Name _____ Date _____

SECTION A Quick questions

1 mark each · write your answer in the box

1 Work out $\frac{1}{2} + \frac{2}{9}$. [1]

Answer

2 Work out $\frac{1}{2} + \frac{3}{5}$. Give your answer as a mixed number. [1]

Answer

3 Work out $\frac{2}{3} - \frac{1}{4}$. [1]

Answer

4 Write $\frac{3}{5}$ and $\frac{5}{6}$ as fractions with the same denominator. [1]

Answer

5 Write $4\frac{1}{6}$ as an improper fraction. [1]

Answer

6 Work out $1\frac{5}{12} + 1\frac{1}{4}$. [1]

Answer

7 Work out $6\frac{1}{3} - 2\frac{4}{5}$. [1]

Answer

8 Is $\frac{1}{9}$ closest to 0, $\frac{1}{2}$ or 1? [1]

Answer

9 Use benchmarks to estimate $\frac{9}{10} + \frac{1}{9}$. Is the answer about 0, about 1 or about 2? [1]

Answer

10 Find the missing fraction: $\frac{1}{5} + \square = \frac{13}{15}$ [1]

Answer

Licensed for use by one family. Please do not share, upload or resell.

Name _____ Date _____

SECTION B Show your working

Marks are given for your method

11 Work out $\frac{1}{2} + \frac{2}{5} + \frac{3}{10}$. Show your working. [2]

Answer

12 Work out $5\frac{1}{3} - 2\frac{3}{5}$. Show your working. [3]

Answer

13 Sara says $\frac{1}{10} + \frac{3}{4} = 4/14$. [3]
(a) What did she do wrong? (b) Work out the correct answer.

Answer

Licensed for use by one family. Please do not share, upload or resell.

Name _____ Date _____

14 A jug holds $2\frac{1}{2}$ litres of water. Tom pours out $\frac{1}{8}$ litre, then $1\frac{5}{6}$ litres. How much water is left? [3]

Answer

15 Rami walks $\frac{2}{9}$ km to the park and then $1\frac{1}{6}$ km to his friend's house. How far does he walk altogether? [2]

Answer

16 Hamid works out $\frac{9}{10} + \frac{3}{4}$ and gets 12/14. [4]
(a) Use benchmarks to explain why his answer cannot be right. (b) Work out the correct answer.

Answer

Licensed for use by one family. Please do not share, upload or resell.

Name _____ Date _____

SECTION C Problem solving

Longer questions with several steps

17 A cookie recipe uses $3\frac{1}{2}$ cups of flour, $\frac{2}{3}$ cup of sugar and $1\frac{3}{4}$ cups of oats. [7]

(a) How many cups of these three ingredients are there altogether? (b) How much more flour than sugar is used?

(c) Ella has 5 cups of flour. How much flour is left after she makes the recipe? (d) Use whole numbers to estimate your answer to (a).

Answer

18 In a garden, $\frac{2}{5}$ is for vegetables and $\frac{1}{4}$ is for flowers. The rest is grass. [6]

(a) What fraction is for vegetables and flowers together?

(b) What fraction of the garden is grass? (c) Which is bigger, the flower part or the grass part? By how much?

Answer

Licensed for use by one family. Please do not share, upload or resell.

Name _____ Date _____

Mark scheme

For parents · give the marks shown; method marks can be given even if the final answer is wrong

Tip: Give method marks generously when the working shows the right idea. If a mistake early on is carried through correctly, give the later marks.

Q	Answer	Marks	How to award the marks
1	$\frac{13}{18}$	1	Simplest form.
2	$1\frac{1}{10}$	1	
3	$\frac{5}{12}$	1	
4	18/30 and 25/30	1	Any common denominator is fine (e.g. 30 or 60).
5	25/6	1	
6	$2\frac{2}{3}$	1	
7	$3\frac{8}{15}$	1	Needs regrouping.
8	0	1	
9	about 1	1	$\frac{9}{10}$ is close to 1 and $\frac{1}{9}$ is close to 0.
10	$\frac{2}{3}$	1	
11	$1\frac{1}{5}$	2	1 mark for a correct common denominator; 1 mark for the answer in simplest form.
12	$2\frac{11}{15}$	3	1 mark for a common denominator; 1 mark for regrouping (or using improper fractions); 1 mark for the answer.
13	(a) She added the denominators; she needs a common denominator and adds only the numerators. (b) $\frac{17}{20}$	3	(a) 1 mark. (b) 2 marks: 1 for a correct common denominator.
14	$\frac{13}{24}$ litre	3	1 mark for each correct subtraction (or for adding what was poured out); 1 mark for the answer.
15	$1\frac{7}{18}$ km	2	1 mark for a common denominator; 1 mark for the answer.
16	(a) Both fractions are close to 1, so the sum is close to 2, but 12/14 is less than 1. (b) $1\frac{13}{20}$	4	(a) 2 marks: 1 for saying each is close to 1. (b) 2 marks: 1 for a common denominator.
17	(a) $5\frac{11}{12}$ cups (b) $2\frac{5}{6}$ cups (c) $1\frac{1}{2}$ cups (d) about 4 + 1 + 2 = 7	7	(a) 3 marks: 1 for a common denominator, 1 for adding, 1 for the answer. (b) 2 marks. (c) 1 mark. (d) 1 mark (accept any sensible estimate).
18	(a) $\frac{13}{20}$ (b) $\frac{7}{20}$ (c) the grass, by $\frac{1}{10}$ of the garden	6	(a) 2 marks. (b) 2 marks: 1 for 1 – (a). (c) 2 marks: 1 for the comparison, 1 for the difference.

Licensed for use by one family. Please do not share, upload or resell.

Name _____ Date _____

What to revise

Circle the questions your child lost marks on, then go back to the matching part of the pack

Questions	Skill	Revise in	✓ / ×
1, 2, 13	Adding fractions	Pack 1 · Unlike Denominators, Part 2	
3	Subtracting fractions	Pack 1 · Unlike Denominators, Part 3	
4	Finding a common denominator	Pack 1 · Unlike Denominators, Part 1	
5	Mixed numbers and improper fractions	Pack 2 · Mixed Numbers, Part 1	
6	Adding mixed numbers	Pack 2 · Mixed Numbers, Part 2	
7, 12	Subtracting mixed numbers	Pack 2 · Mixed Numbers, Part 3	
8	Benchmark fractions	Pack 3 · Fraction Word Problems, Part 1	
9	Estimating and checking	Pack 3 · Fraction Word Problems, Part 2	
10, 11	Missing parts	Pack 1 · Unlike Denominators, Part 4	
14	Two-step word problems	Pack 3 · Fraction Word Problems, Part 4	
15	Word problems: adding	Pack 3 · Fraction Word Problems, Part 3	
16	Estimating and checking	Pack 3 · Fraction Word Problems, Part 2 and Pack 1 · Unlike Denominators, Part 2	
17	Adding and subtracting in a recipe	Pack 2 · Mixed Numbers, Parts 2 and 3 and Pack 3 · Fraction Word Problems, Parts 2 and 3	
18	Fractions of a whole	Pack 1 · Unlike Denominators, Parts 2 and 3 and Pack 3 · Fraction Word Problems, Part 4	

Licensed for use by one family. Please do not share, upload or resell.