Y6 Simplifying Fractions

KS2 Y6 Maths · Follows the national curriculum

Name _____ Class _____ Date _____

1. Worked example

Simplify 18/24.

Step 1 · Factors of 18: 1, 2, 3, 6, 9, 18. Factors of 24: 1, 2, 3, 4, 6, 8, 12, 24

HCF = 6

Step 2 · 18 ÷ 6 and 24 ÷ 6

3/4

Answer: 3/4

Check: 3 and 4 have no common factor except 1 ✓

2. Now try one with the steps

Simplify 45/60 in steps.

Step 1 · Both end in 0 or 5: ÷ 5

Step 2 · Both in the 3 times table: ÷ 3

Answer:

3. Practice

Have a go at each one. There is space underneath to work it out.

1. Simplify 6/8.

2. Simplify 10/15.

3. Simplify 12/16.

4. Simplify 9/27.

5. Simplify 20/50.

6. Simplify 24/36.

7. Simplify 35/42.

8. Simplify 48/64.

9. Simplify 56/70.

10. Simplify 27/45.

11. Which of these is not in its simplest form: 7/12, 9/16, 15/21, 11/18?

12. Simplify 18/12 and write it mixed number.

13. 36/48 = ?/4. What is the missing numerator?

14. Ellie says 13/39 is in its simplest form because 13 is prime. Is she right? Explain.

15. 18 out of 30 children in a class have a pet. What fraction have a pet? Give it in its simplest form.

4. Before you hand it in

Simplifying 18/24 to 9/12 and stopping.
Check again: 9 and 12 are both in the 3 times table, so 9/12 = 3/4. Or use the HCF (6) in one step.

Simplifying 12/16 by subtracting: 12 − 8 = 4, 16 − 8 = 8, so 4/8.

Only multiplying or dividing the top and bottom by the same number keeps a fraction equal. 12/16 = 3/4.

Thinking a fraction with a prime numerator is always in its simplest form.

13/39: 39 = 3 × 13, so it simplifies to 1/3.