## Year 6 Arithmetic Quiz 4

Add and Subtract Fractions.


| 4 | $\frac{3}{8}-\frac{1}{8}=$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| $5$ | $\frac{3}{4}+\frac{5}{8}=$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| $6$ | $\frac{2}{3}+\frac{1}{2}=$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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$7 \quad \frac{7}{8}+\frac{4}{5}=$
8.
(20
$10 \quad \frac{5}{6}-\frac{1}{2}=$
$11 \quad \frac{4}{9}-\frac{3}{8}=$



Multiply fractions by whole numbers and fractions.
$13 \quad 4 \frac{1}{3} \times 2=$
$146 \times 4 \frac{1}{2}=$

$16 \quad 3 \frac{2}{5} \times 2=$
$17 \quad 5 \times 3 \frac{5}{6}=$
$18 \quad 3 \frac{3}{4} \times 2=$

$20 \quad \frac{1}{5} \times \frac{1}{2}=$
$21 \frac{1}{3} \times \frac{1}{8}=$
$22 \frac{3}{5} \times \frac{2}{3}=$

$23 \quad \frac{1}{4} \times \frac{2}{5}=$
$24 \frac{7}{8} \times \frac{3}{5}=$

Divide proper fractions by whole numbers.

## $25 \quad \frac{1}{4} \div 2=$

$26 \quad \frac{1}{5} \div 4=$
$27 \quad \frac{1}{3} \div 3=$
$28 \quad \frac{1}{6} \div 5=$

$29 \quad \frac{1}{4} \div 3=$

| $30$ | $\frac{1}{3} \div 2=$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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$31 \quad \frac{2}{9} \div 6=$

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$32 \quad \frac{3}{4} \div 3=$

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$34 \quad \frac{3}{10} \div 7=$

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$35 \quad \frac{7}{12} \div 2=$


## Year 6 Arithmetic Quiz 4: Answers

1. $\frac{2}{5}$ or $\frac{4}{10}$
2. $\frac{1}{2}$ or $\frac{4}{8}$
3. $\frac{3}{5}$ or $\frac{6}{10}$
4. $\frac{1}{4}$ or $\frac{2}{8}$
5. $1 \frac{3}{8}$
6. $1 \frac{1}{6}$
7. $1 \frac{27}{40}$
8. $1 \frac{3}{20}$
9. $\frac{11}{20}$
10. $\frac{1}{3}$
11. $\frac{5}{72}$
12. $\frac{3}{10}$
13. $8 \frac{2}{3}$
14. 27
15. $11 \frac{1}{4}$
16. $6 \frac{4}{5}$
17. $19 \frac{1}{6}$
18. $7 \frac{1}{2}$
19. $\frac{1}{20}$
20. $\frac{1}{10}$
21. $\frac{1}{24}$
22. $\frac{2}{5}$
23. $\frac{1}{10}$
24. $\frac{21}{40}$
25. $\frac{1}{8}$
26. $\frac{1}{20}$
27. $\frac{1}{9}$
28. $\frac{1}{30}$
29. $\frac{1}{12}$
30. $\frac{1}{6}$
31. $\frac{1}{27}$
32. $\frac{1}{4}$
33. $\frac{3}{40}$
34. $\frac{3}{70}$
35. $\frac{7}{24}$
36. $\frac{2}{15}$

## Year 6 Arithmetic Quiz 4

## Add and Subtract Fractions



## Adding and subtracting fractions with the same denominator:

Add or subtract the numerators, the denominator remains the same.
$\frac{2}{5}+\frac{1}{5}=\frac{3}{5}$ and $\frac{4}{5}-\frac{2}{5}=\frac{2}{5}$

## Adding and subtracting fractions with denominators that are multiples:

The denominator must be the same, so find the equivalent fractions with the same denominator. This will usually be by multiplying the numerator and denominator by the same number.
$\frac{3}{10}+\frac{2}{5}=\frac{3}{10}+\frac{4}{10}=\frac{7}{10}$ and $\frac{3}{4}-\frac{3}{8}=\frac{6}{8}-\frac{3}{8}=\frac{3}{8}$

## Adding and subtracting fractions using equivalent fractions:

The denominator must be the same, so sometimes both fractions are changed to equivalent fractions with the same denominator.
$\frac{3}{4}+\frac{1}{5}=\frac{15}{20}+\frac{4}{20}=\frac{19}{20}$ and $\frac{2}{3}-\frac{1}{5}=\frac{10}{15}-\frac{3}{15}=\frac{7}{15}$

## Multiply fractions by whole numbers and fractions

Multiplying the mixed numbers by whole numbers:
Multiply the whole numbers and multiply the fraction by the whole number. When multiplying the fraction by the whole number, multiply the numerator by the whole number. The denominator stays the same.
$2 \frac{1}{4} \times 3=6 \frac{3}{4}$ because $2 \times 3=6$ and $\frac{1}{4} \times 3=\frac{3}{4}$

## Multiplying fractions

Multiply the numerators and multiply the denominators:
$\frac{2}{3} \times \frac{3}{5}=\frac{6}{15}$

## Divide proper fractions by whole numbers

To divide proper fractions by whole numbers, multiply the denominator by the whole number:
$\frac{2}{3} \div 5=\frac{2}{15}$

