Tuesday

BODMAS/BIDMAS

Brackets Order/Index Division Multiplication Addition Subtraction

$6 + 4 \times 2 =$

Use brackets in these calculations.
How many different answers can you get?

1. $100 - (20 \times 3) =$

2. $(35 - 15) + (27 - 7) =$

3. $15 + (6 \times 6) =$

4. $(4 + 5) \times (3 + 6) =$

5. $(5 + 5) \times (5 - 2) =$

6. $50 - (6 \times 6) =$

7. $(4 + 8) \times (3 - 2) =$
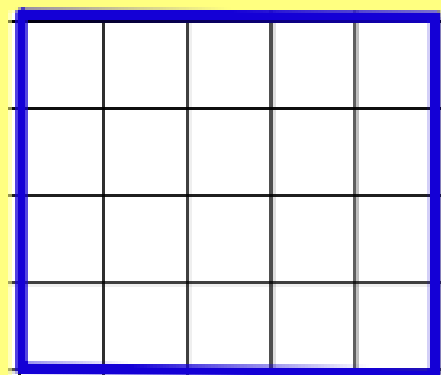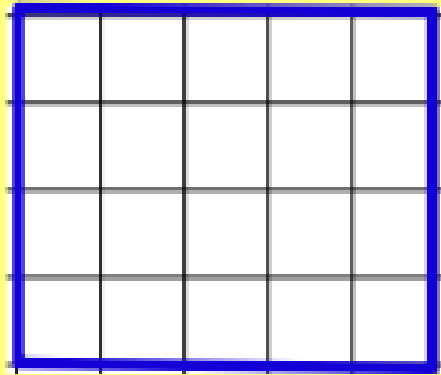
8. $(9 - 3) + (6 \times 6) =$

1. $4 + 4 \times 5 - 3 =$

2. $8 + 5 \times 1 + 3 - 6 =$

Why are these fractions the same?
What do they look like?

$$\frac{15}{20} = \frac{3}{4}$$

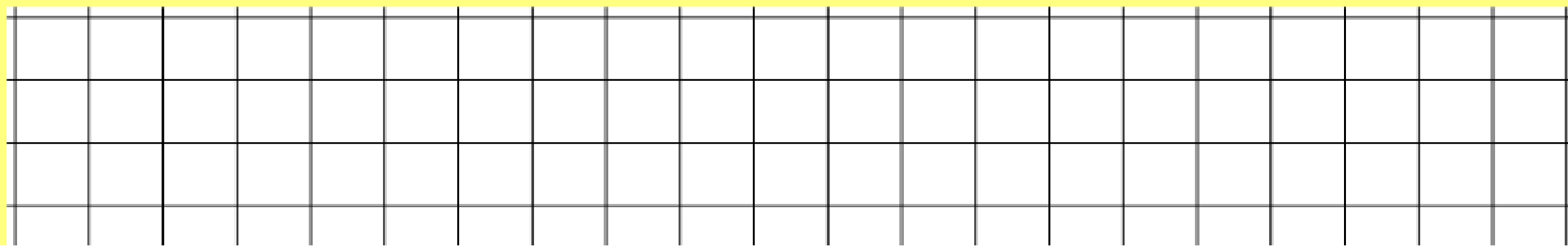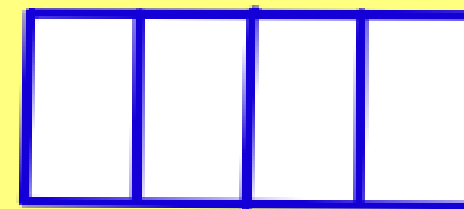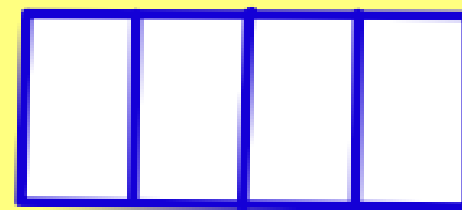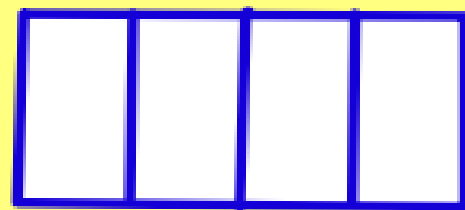Can you draw more examples to show equivalent fractions?

L.O. Add and subtract fractions.

What are the parts of a fraction called?

What do fractions look like?

Use paper strips for this calculation.

$$\frac{1}{2} \quad + \quad \frac{3}{4} \quad =$$
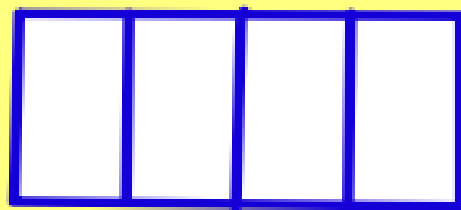
L.O. Add and subtract fractions.

Convert the fractions to equivalents with the same denominator.

Add the two converted fractions.

Add on the whole numbers from the original mixed numbers.

$$\frac{3}{5} + \frac{7}{10} = \boxed{}$$

$$\frac{4}{5} - \frac{7}{10} =$$

Addition of Fractions

$$\frac{1}{5} \quad + \quad \frac{2}{5} \quad = \quad \frac{3}{5}$$
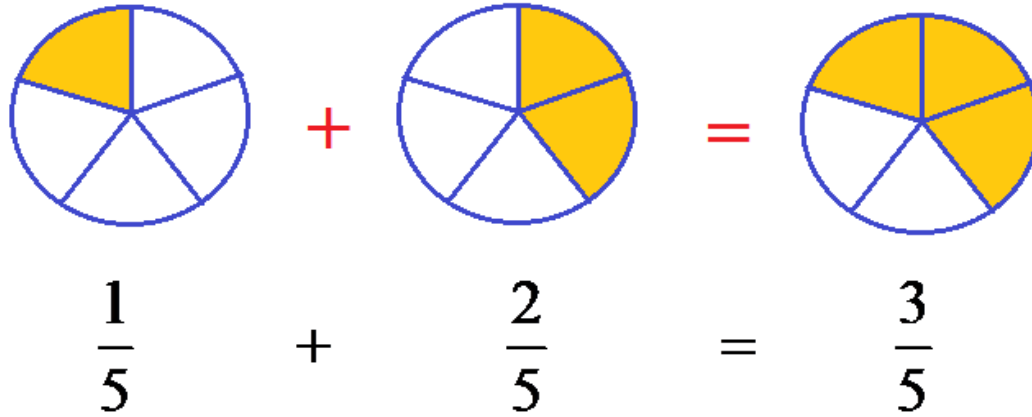
iknowit · Adding Fractions with Unlike Denomionators · Welcome!

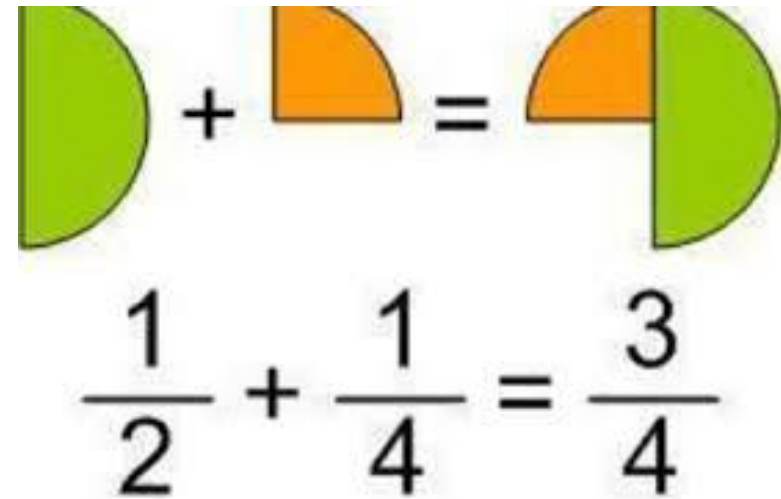Add. Use the fraction strips to help.

| $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{6}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ | $\frac{1}{12}$ |

$$\frac{3}{6} + \frac{5}{12} = \frac{\square}{\square}$$

Progress 1/15

Score 0

Hint · Submit

$$\frac{1}{2} + \frac{1}{4} = \frac{3}{4}$$
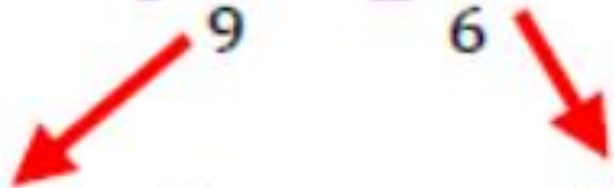
Why is this a harder progression?

Add.

$$\frac{1}{2} + \frac{2}{5} = \boxed{}$$

L.O. Add and subtract fractions.

$$3\frac{4}{9} + 2\frac{5}{6}$$

$$\frac{4}{9} = \frac{8}{18} \quad \text{and} \quad \frac{5}{6} = \frac{15}{18}$$

y). $\quad \frac{8}{18} + \frac{15}{18} = \frac{23}{18} = 1\frac{5}{18}$

$$1\frac{5}{18} + 3 + 2 = 6\frac{5}{18}$$

$$3\frac{4}{9} - 2\frac{5}{6}$$

$$3\frac{4}{9} = \frac{31}{9} \quad \text{and} \quad 2\frac{5}{6} = \frac{17}{6}$$

tor. $\quad \frac{31}{9} = \frac{62}{18} \quad \text{and} \quad \frac{17}{6} = \frac{51}{18}$

$$\frac{62}{18} - \frac{51}{18} = \frac{11}{18}$$

A

Copy and complete.

1. $\dfrac{4}{9} + \dfrac{1}{9} = \dfrac{\square + \square}{9} = \dfrac{\square}{9}$

2. $\dfrac{23}{100} + \dfrac{39}{100} = \dfrac{\square + \square}{100} = \dfrac{\square}{100}$

3. $\dfrac{3}{4} - \dfrac{1}{4} = \dfrac{\square - \square}{4} = \dfrac{\square}{4}$

4. $\dfrac{5}{8} - \dfrac{3}{8} = \dfrac{\square - \square}{8} = \dfrac{\square}{8}$

5. $\dfrac{3}{5} + \dfrac{4}{5} = \dfrac{\square}{5} = 1\dfrac{\square}{5}$

6. $\dfrac{7}{12} + \dfrac{7}{12} = \dfrac{\square}{12} = 1\dfrac{\square}{12}$

7. $1\dfrac{1}{6} - \dfrac{5}{6} = \dfrac{\square}{6} - \dfrac{5}{6} = \dfrac{\square}{6}$

8. $1\dfrac{3}{10} - \dfrac{7}{10} = \dfrac{\square}{10} - \dfrac{7}{10} = \dfrac{\square}{10}$

Work out

9. $\dfrac{1}{5} + \dfrac{2}{5}$

10. $\dfrac{3}{8} + \dfrac{3}{8}$

11. $\dfrac{99}{100} - \dfrac{12}{100}$

12. $\dfrac{7}{9} - \dfrac{5}{9}$

13. $\dfrac{6}{7} + \dfrac{4}{7}$

14. $\dfrac{3}{4} + \dfrac{3}{4}$

15. $1\dfrac{1}{3} - \dfrac{2}{3}$

16. $1\dfrac{4}{11} - \dfrac{9}{11}$

Work out

9. $\dfrac{4}{10} + \dfrac{1}{2}$

10. $\dfrac{3}{4} + \dfrac{5}{12}$

11. $\dfrac{7}{8} - \dfrac{1}{4}$

12. $1\dfrac{1}{3} - \dfrac{5}{6}$

13. $1\dfrac{43}{100} + 5\dfrac{79}{100}$

14. $3\dfrac{2}{9} + 1\dfrac{7}{9}$

15. $4\dfrac{4}{5} - 2\dfrac{3}{5}$

16. $6\dfrac{7}{12} - 3\dfrac{11}{12}$

B

Continue to complete. Write answers in lowest terms or as mixed numbers where necessary.

1. $\dfrac{1}{2} + \dfrac{3}{8} = \dfrac{\square}{8} + \dfrac{3}{8} = \dfrac{\square}{8}$

2. $\dfrac{11}{12} - \dfrac{5}{6} = \dfrac{11}{12} - \dfrac{\square}{12} = \dfrac{\square}{12}$

3. $\dfrac{5}{9} + \dfrac{1}{3} = \dfrac{5 + \square}{9} = \dfrac{\square}{9}$

4. $\dfrac{4}{5} - \dfrac{7}{10} = \dfrac{\square - 7}{10} = \dfrac{\square}{10}$

5. $3\dfrac{2}{7} + 1\dfrac{3}{7} = 4\dfrac{\square + \square}{7} = \ldots$

6. $1\dfrac{7}{11} + 2\dfrac{10}{11} = 3\dfrac{\square + \square}{11} = \ldots$

7. $4\dfrac{61}{100} - 1\dfrac{37}{100} = 3\dfrac{\square + \square}{100} = \ldots$

8. $7\dfrac{4}{9} - 3\dfrac{5}{9} = 4\dfrac{\square + \square}{9} = \ldots$

C

Work out

1. $\dfrac{1}{4} + \dfrac{1}{3}$

2. $\dfrac{2}{7} + \dfrac{1}{2}$

3. $\dfrac{2}{3} + \dfrac{3}{5}$

4. $\dfrac{9}{10} + \dfrac{2}{3}$

5. $\dfrac{7}{12} - \dfrac{1}{5}$

6. $\dfrac{9}{10} - \dfrac{3}{4}$

7. $1\dfrac{1}{6} - \dfrac{5}{8}$

8. $1\dfrac{1}{2} - \dfrac{4}{5}$

9. $2\dfrac{1}{3} + 1\dfrac{5}{12}$

10. $3\dfrac{57}{100} + 3\dfrac{3}{4}$

11. $5\dfrac{2}{5} + 2\dfrac{3}{10}$

12. $1\dfrac{3}{4} + 1\dfrac{7}{8}$

13. $3\dfrac{1}{2} - 1\dfrac{21}{100}$

14. $4\dfrac{3}{8} - 3\dfrac{5}{16}$

15. $2\dfrac{1}{2} - 1\dfrac{2}{3}$

16. $5\dfrac{125}{1000} - 2\dfrac{4}{5}$

Fraction Maze

- You can travel through this maze either horizontally or vertically.
- Cells in the maze can be visited only once.
- As you pass through a number, add it to your score.

In $\longrightarrow$

$\dfrac{1}{4}$	$\dfrac{7}{8}$	$\dfrac{1}{2}$
$\dfrac{1}{8}$	$\dfrac{5}{8}$	$\dfrac{3}{4}$
$\dfrac{3}{8}$	$1\dfrac{1}{2}$	$1\dfrac{1}{8}$

$\longrightarrow$ **Out**
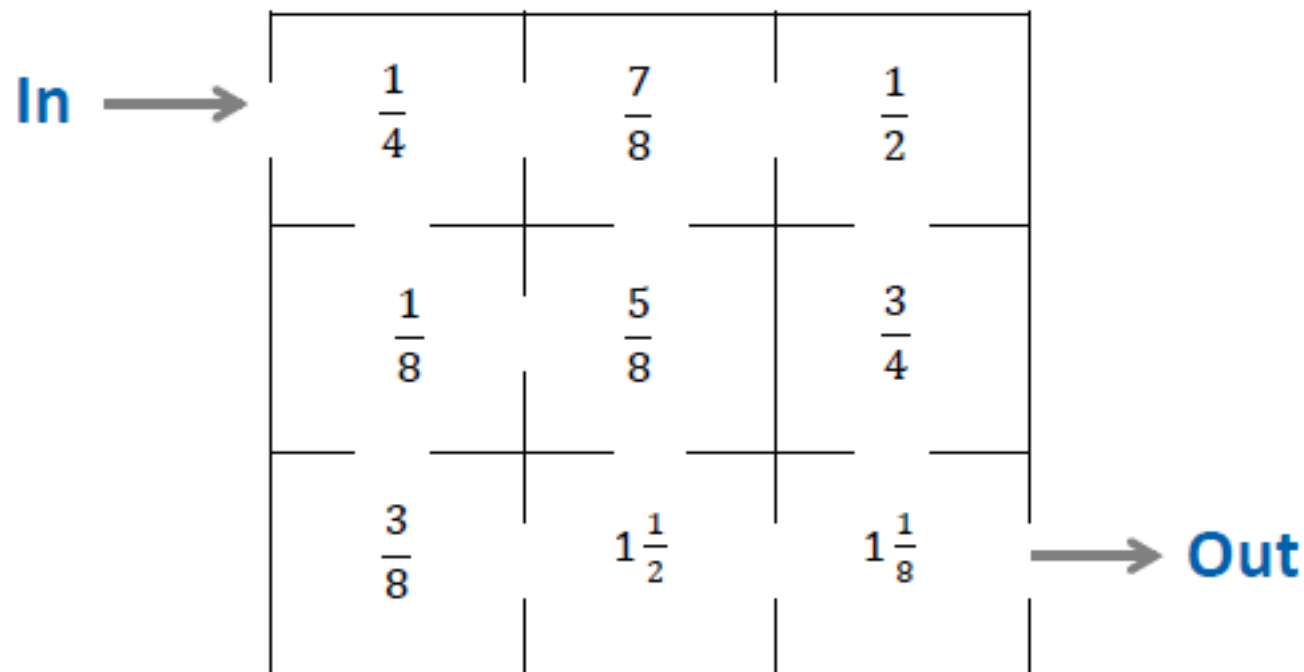
- Which path gives a total of $4\dfrac{3}{8}$?
- Which path gives the smallest total?
- Which path gives the largest total?

- Investigate the largest and smallest totals when toy alternately add and subtract the fractions.

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A

1 $\frac{5}{9}$

2 $\frac{62}{100}$

3 $\frac{2}{4}$

4 $\frac{2}{8}$

5 $1\frac{2}{5}$

6 $1\frac{2}{12}$

7 $\frac{2}{6}$

8 $\frac{6}{10}$

9 $\frac{3}{5}$

10 $\frac{6}{8}$

11 $\frac{87}{100}$

12 $\frac{2}{9}$

13 $1\frac{3}{7}$

14 $1\frac{2}{4}$

15 $\frac{2}{3}$

16 $\frac{6}{11}$

B

1 $\frac{7}{8}$

2 $\frac{1}{12}$

3 $\frac{8}{9}$

4 $\frac{1}{10}$

5 $4\frac{5}{7}$

6 $4\frac{6}{11}$

7 $3\frac{6}{25}$

8 $3\frac{8}{9}$

9 $\frac{9}{10}$

10 $1\frac{1}{6}$

11 $\frac{5}{8}$

12 $\frac{1}{2}$

13 $7\frac{11}{50}$

14 5

15 $2\frac{1}{5}$

16 $2\frac{2}{3}$

C

1 $\frac{7}{12}$

2 $\frac{11}{14}$

3 $1\frac{4}{15}$

4 $1\frac{17}{30}$

5 $\frac{23}{60}$

6 $\frac{3}{20}$

7 $\frac{13}{24}$

8 $\frac{7}{10}$

9 $3\frac{3}{4}$

10 $7\frac{8}{25}$

11 $7\frac{7}{10}$

12 $3\frac{5}{8}$

13 $2\frac{29}{100}$

14 $1\frac{1}{16}$

15 $\frac{5}{6}$

16 $2\frac{13}{40}$