

# 0.2 Skills Review

## Combination rules ?

$$\begin{aligned}
 & 2 + 3 - (4 + 2) - (-5) \\
 = & 2 + 3 - (6) - (-5) \\
 = & 2 + 3 - 6 + 5 \\
 = & 4
 \end{aligned}$$

## Order of operations

B.E.D.M.A.S ?

$$\begin{aligned}
 & 6 + 4 \times 4 \div (2 + 6) \\
 = & 6 + 4 \times 4 \div (8) \\
 = & 6 + 16 \div 8 \\
 = & 6 + 2 \\
 = & 8
 \end{aligned}$$

## Fractions ?

- Adding and subtracting you need a CD (Common Denominator)
- Multiplying you DO NOT need a CD top x top  
bottom x bottom
- Dividing -invert the divisor and multiply  
ie flip the second fraction  
and multiply

$$\begin{aligned}
 \frac{1}{2} + \frac{2}{3} &= \frac{3}{6} + \frac{4}{6} \\
 &= \frac{7}{6}
 \end{aligned}$$

$$\begin{aligned}
 \frac{1}{2} \times \frac{2}{3} &= \frac{2}{6} \\
 &= \frac{1}{3}
 \end{aligned}$$

$$\begin{aligned}
 \frac{1}{2} \div \frac{7}{3} &= \frac{1}{2} \times \frac{3}{7} \\
 &= \frac{3}{14}
 \end{aligned}$$

FLIP

$$\begin{aligned}
 \frac{1}{2} \times \frac{2}{3} + \frac{3}{4} \\
 = \frac{2}{6} + \frac{3}{4} \\
 = \frac{2}{6} + \frac{9}{12} \\
 = \frac{4}{12} + \frac{9}{12} \\
 = \frac{13}{12}
 \end{aligned}$$

$$\begin{aligned}
 5 \times \frac{1}{2} - \frac{2}{3} \\
 = \frac{5}{1} \times \frac{1}{2} - \frac{2}{3} \\
 = \frac{5}{2} - \frac{2}{3} \\
 = \frac{15}{6} - \frac{4}{6} \\
 = \frac{11}{6}
 \end{aligned}$$

$$\begin{aligned}
 -5 \times \frac{-3}{5} \\
 = \frac{-5}{1} \times \frac{-3}{5} \\
 = \frac{15}{5} \\
 = 3
 \end{aligned}$$

## Convert Mixed Number to Improper Fractions

$$5\frac{2}{3}$$

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

$$= \frac{17}{3}$$

$$6\frac{1}{2} - \frac{3}{8}$$

$$= \frac{12}{2} + \frac{1}{2} - \frac{3}{8}$$

$$= \frac{13}{2} - \frac{3}{8}$$

$$= \frac{52}{8} - \frac{3}{8} \rightarrow = \frac{49}{8}$$

While you work on your Order of Operations with Fractions handout you can take turns coming up in pairs and try the fraction challenge

Fraction Web Game

**3 OUT OF 2  
PEOPLE  
— HAVE —  
TROUBLE  
— WITH —  
FRACTIONS**



Try to fill in the missing numbers.

Use the numbers 1 through 9 to complete the equations. Each number is only used once.

Each row is a math equation. Each column is a math equation.

Remember that multiplication and division are performed before addition and subtraction.

1.

	+		-		1
-		+		+	
	X		-		29
-		X		-	
	X		-		-1
-10		9		1	

2.

	X		/		12
+		+		-	
	+		+		15
-		-		+	
	X		+		16
1		13		7	

3.

	+		/		7
+		X		-	
	+		-		5
-		/		X	
	/		+		13
3		3		-16	

Answers