Name: _____ Date: _____

Adding or Subtracting Unlike Fractions

Q1.   A piece of wooden stick 7/8 metre long broke into two pieces. One piece
was 1/4 metre long. How long is the other piece?

Sol.

Q2.   Sam bought 2/5 metre of rope and Tom 3/4 metre of rope. What is the
total length of the rope they bought?

Sol.

Adding or Subtracting Unlike Fractions

Q1.   A piece of wooden stick 7/8 metre long broke into two pieces. One piece was 1/4 metre long. How long is the other piece?

Sol.   Other piece = 7/8 – 1/4
LCM (least common multiple) of the denominators 8 and 4

2	4, 8
2	2, 4
2	1, 2
	1, 1

LCM = 2 X 2 X 2 = 8. Now, we convert the given fractions to equivalent fractions with denominator 8.

We have, $\dfrac{7}{8} = \dfrac{7x1}{8x1} = \dfrac{7}{8}$; $\dfrac{1}{4} = \dfrac{1x2}{4x2} = \dfrac{2}{8}$

$\dfrac{7}{8} - \dfrac{2}{8} = \dfrac{7-2}{8} = \dfrac{5}{8}$

Q2.   Sam bought 2/5 metre of rope and Tom 3/4 metre of rope. What is the total length of the rope they bought?

Sol.   Total length of rope = 2/5 + 3/4
LCM (least common multiple) of the denominators 4 and 5

4	4, 5
5	1, 5
	1, 1

LCM = 4 X 5 = 20

Now, we convert the given fractions to equivalent fractions with denominator 20.

We have, $\dfrac{2}{5} = \dfrac{2x4}{5x4} = \dfrac{8}{20}$; $\dfrac{3}{4} = \dfrac{3x5}{4x5} = \dfrac{15}{20}$

$\dfrac{8}{20} + \dfrac{15}{20} = \dfrac{23}{20} = 1\dfrac{3}{20}$