

## Math 105 Skill Builder # F - 10

### Adding Fractions with the Same Denominator – Simplification Required

**Step 1** Add the numerators.

**Step 2** Write the sum over the common denominator.

For example,

$$\frac{3}{25} + \frac{7}{25} = \frac{3+7}{25} \quad \text{Add the numerators}$$

$$= \frac{10}{25} \quad \text{Retain the common denominator.}$$

$$= \frac{2}{5} \quad \text{Divide 10 and 25 by 5.}$$

**Examples:**

Adding Fractions
$\frac{5}{24} + \frac{7}{24} = \frac{5+7}{24} = \frac{12}{24} = \frac{\cancel{12} \cdot 1}{\cancel{12} \cdot 2} = \frac{1}{2}$
$\frac{11}{18} + \frac{5}{18} = \frac{11+5}{18} = \frac{16}{18} = \frac{\cancel{2} \cdot 8}{\cancel{2} \cdot 9} = \frac{8}{9}$
$\frac{14}{25} + \frac{6}{25} = \frac{14+6}{25} = \frac{20}{25} = \frac{4 \cdot \cancel{5}}{5 \cdot \cancel{5}} = \frac{4}{5}$

**Math 105 Skill Builder # F - 10****Adding Fractions with the Same Denominator – Simplification Required**

Perform the indicated operation:

1)  $\frac{24}{50} + \frac{14}{50} =$

2)  $\frac{13}{70} + \frac{1}{70} =$

3)  $\frac{5}{22} + \frac{7}{22} =$

4)  $\frac{4}{44} + \frac{16}{44} =$

5)  $\frac{7}{18} + \frac{5}{18} =$

6)  $\frac{1}{32} + \frac{9}{32} =$

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Answers:

1)  $\frac{19}{25}$

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

3)  $\frac{6}{11}$

4)  $\frac{5}{11}$

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

6)  $\frac{5}{16}$

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