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Practice worksheet for Fractions & Linear Equations

Fractions

1. Convert to mixed fraction:

$$\frac{25}{10}, \frac{15}{4}$$

Convert to improper fraction:

$$2\frac{1}{5}$$
 , $3\frac{2}{3}$

2. Fill in the boxes:

$$\frac{4}{5} = \frac{24}{\Box}$$

$$\frac{12}{15} = \frac{\Box}{5}$$

3. Which of the following pairs of fractions are like?

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

$$\frac{12}{15}, \frac{4}{15}$$

$$\frac{10}{20}$$
, $\frac{20}{10}$

4. Add:

a)
$$\frac{3}{4} + \frac{4}{5}$$

b)
$$\frac{5}{6} + \frac{7}{12}$$

5. Subtract:

a)
$$\frac{7}{9} - \frac{12}{18}$$
 b) $\frac{3}{9}$

b)
$$\frac{3}{9}$$
 from $\frac{2}{5}$

6. Multiply:

a)
$$\frac{6}{7} \times \frac{3!}{18}$$

b)
$$\frac{15}{24} \times \frac{36}{40}$$

7. Divide:

a)
$$\frac{7}{25} \div \frac{56}{45}$$

b)
$$\frac{33}{60} \cdot \frac{55}{20}$$

Linear Equations

A] Write each of the following statements as an equation.

- 1. A number decreased by 15 equals to 40.
- 2. Thrice a number is 12.
- 3. A number divided by 7 gives the result 14.
- 4. A number increased by 3 equals 15.
- 5. 8 subtracted from a number equals 30.

B) Write a statement for the equation given below.

1.
$$2x - 8 = 12$$

2.
$$y + 4 = 72$$

3.
$$z + 5 = 44$$

4.
$$b \div 8 = 13$$

C] Write each of the following statement as an equation and solve.

- a. A number divided by 10 equals 3.
- b. 31 added to a number gives 75
- c. Five times a number is 400.
- d. 18 subtracted from a number gives 22.

- e. A number divided by 4 equals 55.
- f. Product of a number and 7 is 63.
- g. A number decreased by 6 equals 30.

Answers:

Fractions

1. :
$$2\frac{5}{10}$$
: $3\frac{3}{4}$; $\frac{11}{5}$, $\frac{11}{3}$

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

$$\frac{11}{5}$$
 , $\frac{11}{3}$

4 a.
$$\frac{31}{20} = 1\frac{11}{20}$$
 b. $\frac{17}{12} = 1\frac{5}{12}$

b.
$$\frac{17}{12}$$
 = $1\frac{5}{12}$

5 .a.
$$\frac{2}{18} = \frac{1}{9}$$
 b. $\frac{3}{45} = \frac{1}{15}$

b.
$$\frac{3}{45} = \frac{1}{15}$$

6. a.
$$\frac{5}{3} = 1 = \frac{2}{3}$$

b.
$$\frac{9}{16}$$

7. a.
$$\frac{9}{40}$$

b.
$$\frac{1}{5}$$

Equations:

3)
$$\frac{m}{7} = 14$$

4)
$$g + 3 = 15$$

C] a)
$$\frac{m}{10} = 3$$

b)
$$y + 31 = 75$$
 c) $5k = 400$

c)
$$5k = 400$$

$$m = 30$$

$$y = 44$$
 $k = 80$

$$k = 80$$

d)
$$z-18 = 22$$

e)
$$\frac{w}{4} = 55$$
 f) $7v = 63$ g) $n-6 = 30$
 $w = 220$ $v = 9$ $n = 36$

f)
$$7v = 63$$

$$z = 40$$

$$w = 220$$

$$v=9$$

$$n = 36$$