

Nombre:

Fecha:

1. (1p) Write the numbers $3/2$, $9/4$, $5/12$ and $47/100$ (also in spanish).

2. (1p) a) Write $7/12$ and $4/25$ as decimal numbers.

b) Write 1.24 and $1.2\overline{4}$ as irreducible fractions.

3. (0.5p) a) Find three equivalent fractions to $5/8$. b) Simplify $108/126$ to the irreducible fraction.

4. (0.5p) Calculate the unknown term x : a) $\frac{x}{35} = \frac{20}{14}$ b) $\frac{24}{x} = \frac{42}{56}$

5. (0.5p+0.5p*) Calculate, and simplify if possible:

a) $\frac{5}{3} + \frac{1}{4}$ b) $\frac{7}{10} - \frac{9}{8}$ c) $\frac{5}{2} - 2 + \frac{3}{4} - \frac{2}{5}$ d) $\frac{5}{6} - \left(\frac{1}{3} - \frac{2}{9}\right)$

6. (0.5p+0.5p*) Calculate, and simplify if possible:

a) $\frac{2}{3} \cdot \frac{1}{4}$ b) $\frac{12}{10} \div \frac{9}{8}$ c) $\frac{5}{2} \div \frac{3}{4} \cdot \frac{9}{16} \div \frac{15}{4}$ d) $\frac{5}{6} \div \left(\frac{10}{4} \div \frac{8}{5}\right)$

7. (1p) Calculate, and simplify if possible:

a) $\frac{2}{5} + \frac{1}{4} \cdot \frac{3}{2} - 1$ b) $\frac{1}{7} - \left(\frac{3}{7} \div \frac{15}{14}\right)$

1. (1p) $\frac{3}{2}$ Three halves. Tres medios.

$\frac{9}{4}$ Nine quarters. Nueve cuartos.

$\frac{5}{12}$ Five Twelfths. Cinco doceavos.

$\frac{47}{100}$ Forty-seven hundredths. Cuarenta y siete centésimos.

2. (1p) a) $\frac{7}{2} = 0,58\overline{3}$, $\frac{4}{25} = 0,16$ b) $1,24 = \frac{124}{100} = \frac{31}{25}$, $1,2\overline{4} = \frac{124 - 12}{90} = \frac{56}{45}$

3. (0.5p) a) $\frac{5}{8} = \frac{10}{16} = \frac{15}{24} = \frac{20}{32} = \dots = \frac{50}{80} = \frac{500}{800} = \dots$ b) $\frac{108}{126} = \frac{2^2 \cdot 3^3}{2 \cdot 3^2 \cdot 7} = \frac{6}{7}$

4. (0.5p) a) $x = \frac{35 \cdot 20}{14} = \frac{5 \cdot 7 \cdot 10 \cdot 2}{2 \cdot 7} = 50$ b) $x = \frac{24 \cdot 56}{42} = \frac{4 \cdot 6 \cdot 7 \cdot 8}{6 \cdot 7} = 32$

5. (1p) a) $\frac{23}{12}$ b) $-\frac{17}{40}$ c) $\frac{17}{20}$ d) $\frac{13}{18}$

6. (1p) a) $\frac{1}{6}$ b) $\frac{16}{15}$ c) $\frac{1}{2}$ d) $\frac{8}{15}$

7. (1p) a) $-\frac{9}{40}$ b) $-\frac{9}{35}$