

Complex Fractions

Simplify each expression.

$$1) \frac{\frac{4}{3} - \frac{3}{4}}{\frac{3}{4} - \frac{3}{2}}$$

$$-\frac{16}{3}$$

$$2) \frac{\frac{1}{4} + \frac{5}{4}}{\frac{4}{4}}$$

$$\frac{3}{8}$$

$$3) \frac{\frac{4}{5}}{\frac{2}{25} - \frac{5}{16}}$$

$$-\frac{320}{93}$$

$$4) \frac{\frac{2}{3} - \frac{4}{2}}{\frac{3}{2} - \frac{4}{3}}$$

$$12$$

$$5) \frac{\frac{x}{3} + \frac{1}{x}}{\frac{3}{x} + \frac{1}{x}}$$

$$\frac{x^2}{4}$$

$$6) \frac{\frac{16}{m-1}}{\frac{16}{5} - \frac{16}{25}}$$

$$\frac{25}{4m-4}$$

$$7) \frac{9}{\frac{9}{x} + \frac{2}{3x}}$$

$$\frac{27x}{29}$$

$$8) \frac{a^2}{\frac{4}{5} - \frac{4}{a}}$$

$$\frac{5a^3}{4a - 20}$$

$$9) \frac{\frac{x^2}{9} + \frac{1}{4}}{6x}$$

$$\frac{4x^2 + 9}{216x}$$

$$10) \frac{\frac{a}{8} - \frac{4}{a^2}}{4}$$

$$\frac{a^3 - 32}{32a^2}$$

$$11) \frac{\frac{25}{12} + \frac{x+1}{4}}{\frac{1}{18} - \frac{x+1}{36}}$$

$$\frac{84 + 9x}{1 - x}$$

$$12) \frac{\frac{16}{m-3} - \frac{4}{m-4}}{\frac{16}{m^2} - \frac{m-4}{m-3}}$$

$$\frac{12m^3 - 52m^2}{192 - 112m - m^4 + 8m^3}$$

$$13) \frac{\frac{x-6}{6} - \frac{x-2}{x-6}}{\frac{36}{x-2} + \frac{4}{9}}$$

$$\frac{3x^3 - 60x^2 + 252x - 288}{584x + 8x^2 - 3792}$$

$$14) \frac{\frac{1}{2} - \frac{x+5}{4}}{\frac{x^2}{2} - \frac{5}{2}}$$

$$\frac{-3 - x}{2x^2 - 10}$$