

© Simplify the following.

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

(2)  $\frac{\frac{3}{4}}{-\frac{7}{4}}$

(3)  $\frac{\frac{b}{a}}{\frac{3b}{a}}$

(4)  $\frac{-\frac{2z}{xy}}{\frac{z}{xy}}$

(5)  $\frac{-\frac{k}{mn}}{-\frac{5k}{3mn}}$

© Simplify the following.

(6)  $\frac{\frac{1}{4}}{\frac{3}{7}}$

(7)  $\frac{-\frac{3}{5}}{\frac{2}{3}}$

(8)  $\frac{\frac{2x}{m}}{\frac{3y}{n}}$

(9)  $\frac{-\frac{x}{ab}}{\frac{y}{cd}}$

(10)  $\frac{-\frac{2z}{15xy}}{-\frac{4bc}{3a}}$

☺ Simplify the following.

$$(11) \frac{\frac{1}{5} + \frac{2}{5}}{\frac{3}{5}}$$

$$(12) \frac{\frac{10}{7}}{\frac{8}{7} + \frac{2}{7}}$$

$$(13) \frac{\frac{b}{a} - \frac{c}{a}}{\frac{d}{a}}$$

$$(14) \frac{\frac{x}{mn} + \frac{y}{mn}}{-\frac{z}{mn}}$$

$$(15) \frac{\frac{12}{xy} - \frac{7}{xy}}{\frac{a}{xy}}$$

☺ Simplify the following.

$$(16) \frac{\frac{1}{3} + \frac{1}{4}}{\frac{1}{6}}$$

$$(17) \frac{\frac{2}{21}}{\frac{5}{3} - \frac{9}{7}}$$

$$(18) \frac{\frac{a}{x} + \frac{b}{y}}{\frac{c}{xy}}$$

$$(19) \frac{\frac{x}{mn}}{\frac{y}{m} - \frac{z}{n}}$$

$$(20) \frac{\frac{x}{a} + \frac{y}{b}}{\frac{bx}{ab} + \frac{ay}{ab}}$$

☺ Simplify the following.

$$(21) \frac{2^m - 2^{-m}}{2^{-m}}$$

$$(22) \frac{5^{-m} + 5^{2m}}{5^m}$$

$$(23) \frac{16^{\frac{m}{2}} - 4^{-\frac{m}{2}}}{16^{-\frac{m}{4}}}$$

$$(24) \frac{81^{\frac{m}{4}} + 27^{\frac{m}{3}}}{3^{-m}}$$

$$(25) \frac{7^m + 243^{-\frac{m}{3}}}{49^{-\frac{m}{2}}}$$

☺ Simplify the following.

$$(26) \frac{3^m - 3^{-m}}{3^{-m}}$$

$$(27) \frac{4^{-2m} + 4^{2m}}{16^{-m}}$$

$$(28) \frac{16^{\frac{3m}{4}} - 4^{-\frac{3m}{2}}}{16^{\frac{m}{4}}}$$

$$(29) \frac{256^{\frac{m}{8}} + 32^{\frac{2m}{5}}}{2^{-m}}$$

$$(30) \frac{6^m + 216^{\frac{m}{3}}}{36^{-\frac{m}{2}}}$$

☺ Simplify the following.

$$(31) \frac{3}{a} + \frac{7}{a}$$

$$(32) \frac{2x}{y} + \frac{3x}{y}$$

$$(33) \frac{3n}{m} + \frac{4p}{m}$$

$$(34) \frac{3}{2b} + \frac{1}{3b}$$

$$(35) \frac{a}{x} + \frac{2a}{3x}$$

☺ Simplify the following.

$$(36) \frac{3a}{x} + \frac{2a}{y}$$

$$(37) \frac{2}{x} + \frac{3}{x+5}$$

$$(38) \frac{4}{x+2} + \frac{5}{x+3}$$

$$(39) \frac{1}{a} + \frac{2}{b} + \frac{3}{c}$$

$$(40) \frac{5}{x(1-x)} + \frac{3}{x} + \frac{3}{1-x}$$

☺ Simplify the following.

$$(41) \frac{5}{m} - \frac{7}{m}$$

$$(42) -\frac{b}{a} + \frac{3b}{a}$$

$$(43) \frac{2y}{x} - \frac{3z}{2x}$$

$$(44) \frac{7}{2a} - \frac{2}{a}$$

$$(45) \frac{2y}{x} - \frac{5y}{3x}$$

☺ Simplify the following.

$$(46) \frac{x}{m} - \frac{y}{n}$$

$$(47) \frac{2}{x} - \frac{5}{2x-1}$$

$$(48) \frac{7}{x+1} - \frac{3}{x-1}$$

$$(49) \frac{3}{a} - \frac{2}{b} - \frac{5}{c}$$

$$(50) \frac{1}{x+1} - \frac{2}{x+3} - \frac{4}{(x+1)(x+3)}$$