

Math Worksheets

Simplifying Radical Expressions Involving Fractions

 Simplify.

$$1) \frac{\sqrt{5}}{\sqrt{3}} =$$

$$12) \frac{1-\sqrt{5}}{2-\sqrt{6}} =$$

$$2) \frac{\sqrt{18}}{\sqrt{45}} =$$

$$13) \frac{4+\sqrt{7}}{3-\sqrt{8}} =$$

$$3) \frac{\sqrt{10}}{5\sqrt{2}} =$$

$$14) \frac{5}{-3-3\sqrt{3}} =$$

$$4) \frac{13}{\sqrt{3}} =$$

$$15) \frac{7}{2-\sqrt{5}} =$$

$$5) \frac{12\sqrt{5r}}{\sqrt{m^5}} =$$

$$16) \frac{\sqrt{7}-\sqrt{3}}{\sqrt{3}-\sqrt{7}} =$$

$$6) \frac{11\sqrt{2}}{\sqrt{k}} =$$

$$17) \frac{\sqrt{5}+\sqrt{7}}{\sqrt{7}-\sqrt{5}} =$$

$$7) \frac{6\sqrt{20x^3}}{\sqrt{16x}} =$$

$$18) \frac{2\sqrt{2}-\sqrt{3}}{3\sqrt{2}+\sqrt{5}} =$$

$$8) \frac{\sqrt{14x^3y^4}}{\sqrt{7x^4y^3}} =$$

$$19) \frac{\sqrt{11+5\sqrt{3}}}{4-\sqrt{11}} =$$

$$9) \frac{1}{1-\sqrt{5}} =$$

$$20) \frac{\sqrt{5}+\sqrt{3}}{2-\sqrt{3}} =$$

$$10) \frac{1-8\sqrt{a}}{\sqrt{11a}} =$$

$$21) \frac{\sqrt{32-7b^4}}{\sqrt{2ab^3}} =$$

$$11) \frac{\sqrt{a}}{\sqrt{a}+\sqrt{b}} =$$

$$22) \frac{10\sqrt{21^5}}{5\sqrt{x^3}} =$$

Answers of Worksheets

Simplifying radical expressions involving fractions

$$1) \frac{\sqrt{15}}{3}$$

$$2) \frac{9\sqrt{10}}{45} = \frac{\sqrt{10}}{5}$$

$$3) \frac{\sqrt{20}}{10} = \frac{\sqrt{5}}{5}$$

$$4) \frac{13\sqrt{3}}{3}$$

$$5) \frac{12\sqrt{5mr}}{m^3}$$

$$6) \frac{11\sqrt{2k}}{k}$$

$$7) 3x\sqrt{5}$$

$$8) \frac{\sqrt{2x}}{xy}$$

$$9) \frac{-1-\sqrt{5}}{4}$$

$$10) \frac{\sqrt{11a-8a\sqrt{11}}}{11a}$$

$$11) \frac{a-\sqrt{ab}}{a-b}$$

$$12) \frac{\sqrt{30}+2\sqrt{5}-\sqrt{6}-2}{2}$$

$$13) 12 + 8\sqrt{2} + 3\sqrt{7} + 2\sqrt{14}$$

$$14) -\frac{5(\sqrt{3}-1)}{6}$$

$$15) -14 - 7\sqrt{5}$$

$$16) -1$$

$$17) 6 + \sqrt{35}$$

$$18) \frac{12 - 2\sqrt{10} - 3\sqrt{6} + \sqrt{15}}{13}$$

$$19) \frac{4\sqrt{11}+11+20\sqrt{3}+5\sqrt{33}}{5}$$

$$20) 2\sqrt{5} + 3 + \sqrt{15} + 2\sqrt{3}$$

$$21) 4a^3\sqrt{b}$$

$$22) 2x\sqrt{21}$$