mobius

Math worksheet on *'Radicals - Divide Binomials by Monomials (Values Only) (Level 3)'*. Part of a broader unit on *'Radicals - Division Intro'*

Learn online: app.mobius.academy/math/units/radicals_division_intro/

1 Divide the radical expressions and simplify the answer

$$\frac{2\sqrt{5}-\sqrt{3}}{\sqrt{5}}$$

a $\frac{10-\sqrt{15}}{10}$ **b** $\frac{1-\sqrt{15}}{3}$ **c** $\frac{10+\sqrt{15}}{10}$

d $\frac{10-\sqrt{15}}{5}$ **e** $5+\sqrt{15}$ **f** $\frac{10\sqrt{2}-\sqrt{30}}{10}$

2 Divide the radical expressions and simplify the answer

$$\frac{4\sqrt{3}+\sqrt{11}}{\sqrt{7}}$$

a $\frac{4\sqrt{21}+\sqrt{77}}{7}$ **b** $\frac{4\sqrt{21}+2\sqrt{77}}{7}$

c $\frac{4\sqrt{21}-\sqrt{77}}{4}$ **d** $\frac{\sqrt{21}+\sqrt{77}}{7}$

e $\frac{4\sqrt{2}+\sqrt{154}}{14}$ **f** $\sqrt{21}+\sqrt{77}$

3 Divide the radical expressions and simplify the answer

$$\frac{\sqrt{11}+3\sqrt{2}}{\sqrt{2}}$$

a $\sqrt{3}-6$ **b** $\frac{\sqrt{22}+6}{2}$

c $5\sqrt{22}+6$ **d** $\frac{\sqrt{22}+12}{2}$

e $\frac{\sqrt{22}+1}{3}$ **f** $\frac{\sqrt{22}+6}{4}$

4 Divide the radical expressions and simplify the answer

$$\frac{\sqrt{11}-5\sqrt{11}}{\sqrt{13}}$$

a $\sqrt{143}$ **b** $\frac{-4\sqrt{3}}{39}$ **c** $\frac{\sqrt{143}}{3}$

d $\frac{-4}{5}$ **e** $3\sqrt{143}$ **f** $\frac{-4\sqrt{143}}{13}$

5 Divide the radical expressions and simplify the answer

$$\frac{\sqrt{13}+3\sqrt{5}}{\sqrt{2}}$$

a $\frac{\sqrt{26}+\sqrt{10}}{2}$ **b** $\frac{2\sqrt{26}+3\sqrt{10}}{2}$

c $\sqrt{26}+3$ **d** $\frac{\sqrt{26}+3\sqrt{10}}{2}$

e $\sqrt{26}+\sqrt{10}$ **f** $\sqrt{26}-3\sqrt{10}$

6 Divide the radical expressions and simplify the answer

$$\frac{\sqrt{5}+2\sqrt{3}}{\sqrt{7}}$$

a $\frac{\sqrt{35}+\sqrt{21}}{4}$ **b** $\sqrt{35}+\sqrt{21}$

c $\frac{\sqrt{35}+2}{7}$ **d** $\frac{\sqrt{35}+2\sqrt{21}}{5}$

e $\sqrt{35}-2\sqrt{21}$ **f** $\frac{\sqrt{35}+2\sqrt{21}}{7}$

7 Divide the radical expressions and simplify the answer

$$\frac{\sqrt{3}-3\sqrt{3}}{\sqrt{11}}$$

a $\frac{\sqrt{33}}{3}$ **b** $3\sqrt{33}$ **c** $\sqrt{33}$

d $\frac{-2\sqrt{33}}{11}$ **e** $\frac{-2}{11}$ **f** $\frac{2\sqrt{33}}{11}$