



Math worksheet on 'Radicals - Divide Binomials by Monomials (Values Only) (Level 1)'. 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

a	b	c
$\frac{\sqrt{2} + 2}{2}$	$\frac{\sqrt{2} - 1}{2}$	$\frac{3\sqrt{2} + 2}{2}$
$\frac{3 + \sqrt{2}}{\sqrt{2}}$		
d	e	f
$\sqrt{2} + 2$	$\frac{\sqrt{2} + 1}{2}$	$\frac{3\sqrt{2} - 1}{4}$

2 Divide the radical expressions and simplify the answer

a	b	c
$\frac{1 + 3\sqrt{2}}{5}$	$\frac{\sqrt{2} - 5}{2}$	$\frac{1 + 3\sqrt{2}}{2}$
$\frac{\sqrt{2} + 3}{\sqrt{2}}$		
d	e	f
$\frac{2 + 3\sqrt{2}}{2}$	$2 - 3\sqrt{2}$	1

3 Divide the radical expressions and simplify the answer

a	b	c
$\frac{1 - \sqrt{5}}{4}$	$\frac{3}{5}$	$\frac{\sqrt{2} - \sqrt{10}}{2}$
$\frac{\sqrt{5} - 5}{\sqrt{5}}$		
d	e	f
$1 - \sqrt{5}$	$1 - 5\sqrt{5}$	$1 - 3\sqrt{5}$

4 Divide the radical expressions and simplify the answer

a	b
$\frac{\sqrt{13} + \sqrt{39}}{26}$	$\frac{\sqrt{13} + \sqrt{39}}{2}$
$\frac{2 + \sqrt{3}}{\sqrt{13}}$	
c	d
$2\sqrt{13} + \sqrt{39}$	$\sqrt{13} + \sqrt{39}$
e	f
$2\sqrt{13} - 1$	$\frac{2\sqrt{13} + \sqrt{39}}{13}$

5 Divide the radical expressions and simplify the answer

a	b
$5\sqrt{3} - 11$	$\frac{5\sqrt{11} - 4}{11}$
$\frac{5 - \sqrt{11}}{\sqrt{11}}$	
c	d
$\frac{\sqrt{11} - 11}{5}$	$\frac{5\sqrt{11} + 1}{11}$
e	f
$5\sqrt{11} - 1$	$\frac{5\sqrt{11} - 11}{11}$

6 Divide the radical expressions and simplify the answer

a	b
$\frac{3\sqrt{7} - 4\sqrt{77}}{7}$	$\frac{3\sqrt{7} - 1}{4}$
$\frac{3 - \sqrt{11}}{\sqrt{7}}$	
c	d
$3\sqrt{2} + \sqrt{77}$	$\frac{3\sqrt{7} + \sqrt{77}}{7}$
e	f
$\frac{3\sqrt{7} - \sqrt{77}}{7}$	$\frac{3\sqrt{7} + 5\sqrt{77}}{7}$

7 Divide the radical expressions and simplify the answer

a	b
$\frac{\sqrt{15} - \sqrt{3}}{3}$	$\frac{\sqrt{15} + 5}{5}$
$\frac{\sqrt{5} + 5}{\sqrt{3}}$	
c	d
$\sqrt{15} + 5\sqrt{3}$	$\frac{\sqrt{15} + \sqrt{3}}{3}$
e	f
$\frac{\sqrt{15} + 5\sqrt{3}}{3}$	$\sqrt{15} + \sqrt{3}$