



Math worksheet on 'Radicals - Multiplying Monomials with Binomials (Values Only) (Level 4)'.
Part of a broader unit on 'Radicals - Multiplication Intro'

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

1 Multiply the radical expressions and simplify the answer

$$(2\sqrt[3]{2} + \sqrt[3]{2}) \cdot 2\sqrt[3]{5}$$

a $5\sqrt[3]{10}$

b $6\sqrt[3]{10}$

c $7\sqrt[3]{10}$

d $4 + 2\sqrt[3]{10}$

e $4\sqrt[3]{10} + 2\sqrt[3]{4}$

f $9\sqrt[3]{10}$

2 Multiply the radical expressions and simplify the answer

$$(4\sqrt[3]{3} - \sqrt[3]{11}) \cdot 2\sqrt[3]{3}$$

a $4\sqrt[3]{9} - 2\sqrt[3]{33}$

b $8\sqrt[3]{9} - 2$

c $8\sqrt[3]{9} - \sqrt[3]{33}$

d $8\sqrt[3]{9} - 5\sqrt[3]{33}$

e $\sqrt[3]{9} - 2\sqrt[3]{33}$

f $8\sqrt[3]{9} - 2\sqrt[3]{33}$

3 Multiply the radical expressions and simplify the answer

$$(\sqrt{2} + 3\sqrt{3}) \cdot 4\sqrt{2}$$

a $8 + 5\sqrt{6}$

b $8 + 12\sqrt{6}$

c $8 + 3\sqrt{6}$

d $8 + 12\sqrt{3}$

e $8 + \sqrt{6}$

f $6 + 12\sqrt{6}$

4 Multiply the radical expressions and simplify the answer

$$(3\sqrt{2} + \sqrt{5}) \cdot 4\sqrt{7}$$

a $12\sqrt{14} + 4$

b $\sqrt{14} + 4\sqrt{35}$

c $12\sqrt{14} + \sqrt{35}$

d $4\sqrt{14} + 4\sqrt{35}$

e $12\sqrt{14} + 4\sqrt{35}$

f $12\sqrt{14} + 3\sqrt{35}$

5 Multiply the radical expressions and simplify the answer

$$3\sqrt{2} \cdot (\sqrt{11} + 2\sqrt{3})$$

a $3\sqrt{22} + 6\sqrt{2}$

b $\sqrt{22} + 6\sqrt{6}$

c $3\sqrt{22} + 4\sqrt{6}$

d $3\sqrt{2} + 6\sqrt{6}$

e $3\sqrt{22} + 6\sqrt{6}$

f $3\sqrt{22} + \sqrt{6}$

6 Multiply the radical expressions and simplify the answer

$$2\sqrt{11} \cdot (\sqrt{5} + 3\sqrt{11})$$

a 68

b $\sqrt{55} + 66$

c $3\sqrt{55} + 66$

d $2\sqrt{55} + 11$

e $2\sqrt{55} + 66$

f $2\sqrt{55} + 44$

7 Multiply the radical expressions and simplify the answer

$$2\sqrt[3]{11} \cdot (2\sqrt[3]{3} - \sqrt[3]{7})$$

a $4\sqrt[3]{33} - \sqrt[3]{77}$

b $4\sqrt[3]{33} - 3\sqrt[3]{77}$

c $4\sqrt[3]{33} - 2\sqrt[3]{77}$

d $3\sqrt[3]{33} - 2\sqrt[3]{77}$

e $4\sqrt[3]{33} - 2$

f $\sqrt[3]{33} - 2\sqrt[3]{77}$