

Accuplacer Study Modules

TOPIC: Multiplying Radicals

Instructions: Perform the indicated operation.

1.  $-3\sqrt{5} \cdot 6\sqrt{8}$

$$(-3 \cdot 6)\sqrt{5 \cdot 8}$$

$$-18\sqrt{40}$$

4 10  
^ ^  
2 2 2 5

$$-36\sqrt{10}$$

2.  $5\sqrt{7} \cdot 2\sqrt{7}$

$$(5 \cdot 2)\sqrt{7 \cdot 7}$$

$$10\sqrt{49}$$

$$10 \cdot 7$$

$$70$$

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

$$12 + 3\sqrt{7} + 8\sqrt{5} + 2\sqrt{35}$$

4.  $(2 - 4\sqrt{3})(6 + 3\sqrt{6})$

$$12 + 6\sqrt{6} - 24\sqrt{3} - 12\sqrt{18}$$

9 2  
^ ^  
3 3

$$12 + 6\sqrt{6} - 24\sqrt{3} - 36\sqrt{2}$$