Section 12.2 Worksheet

Name: _____

Simplify the expression.

1.) $\sqrt{200}$

2.) $\sqrt{45}$

3.) $\sqrt{32}$

4.) $\sqrt{27}$

5.) $\sqrt{12}$

6.) $\sqrt{20}$

Simplify the expression.

7.) $\sqrt{3} \cdot \sqrt{21}$

8.) $\sqrt{5} \cdot \sqrt{10}$

9.) $\sqrt{10} \cdot \sqrt{2}$

10.) $\sqrt{5}\,(3\sqrt{2} + \sqrt{5}\,)$

11.) $\sqrt{3}(\sqrt{12} - 6\sqrt{3}\,)$

12.) $(\sqrt{5} + 2)(\sqrt{5} - 2)$

Simplify the expression by rationalizing the denominator.

13.) $\dfrac{3}{\sqrt{2}}$

14.) $\dfrac{7}{\sqrt{3}}$

15.) $\sqrt{\dfrac{16}{75}}$

Simplify the expression.

16.) $10\sqrt{7} + 3\sqrt{7}$

17.) $4\sqrt{5} - 7\sqrt{5}$

18.) $4\sqrt{3} - 2\sqrt{3}$

19.) $12\sqrt{6} + 5\sqrt{6} - 2\sqrt{6}$

20.) $\sqrt{32} + 2\sqrt{2}$

21.) $\sqrt{12} - 2\sqrt{3}$

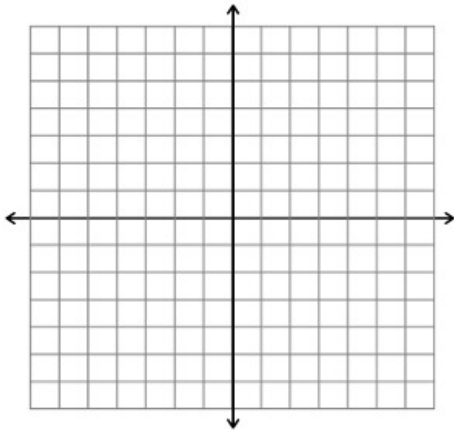22.) $\sqrt{18} - \sqrt{2}$

23.) $\sqrt{28} - \sqrt{63}$

24.) $\sqrt{20} + \sqrt{80}$

REVIEW:

Graph the function. State the domain and range.
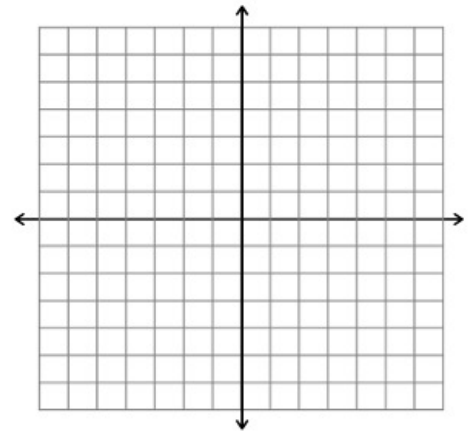
25.) $y = 2\sqrt{x} - 3$

x	y

Domain:_____

Range: _____

26.) $y = 2\sqrt{x}$

x	y

Domain:_____

Range: _____