

Pre-Calc. 11 LG 10A QUIZ (Formative Assessment)

Marking Teacher: _____

Name: _____

Student #: _____

1. Express the mixed radical as an entire radical.

a) $3\sqrt{5}$

b) $2x\sqrt{3}$

c) $2\sqrt[3]{5x^2}$

2. Express the entire radical as a mixed radical.

a) $\sqrt{40}$

b) $\sqrt[3]{54y^5}$

c) $\sqrt{m^6n^3}$

3. Simplify and identify any restrictions where possible.

a) $-2\sqrt{45} + \sqrt{80}$

b) $4\sqrt[3]{m^4} - 5m\sqrt[3]{8m}$

4. Order from the least to the greatest.

$$2\sqrt{7}, \quad 5, \quad 4\sqrt{2}$$

5. Multiply, then simplify.

a) $3\sqrt{5}(7\sqrt{2})$

b) $-5\sqrt{8x}(2\sqrt{3})$

c) $\sqrt[3]{81y^4}(\sqrt[3]{2y})$

6. Expand and simplify.

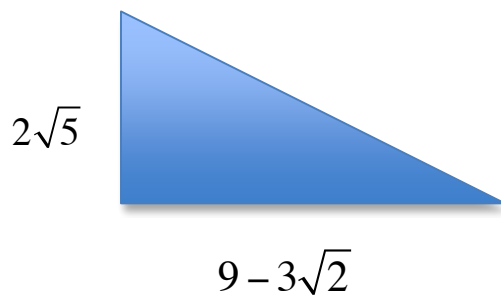
$$(4 - 9\sqrt{5})(4 + 9\sqrt{5})$$

7. Simplify by rationalizing $\frac{12}{\sqrt{5}}$.

8. Find the exact area of the rectangle.



9. Find the exact area of the triangle.



10. Simplify by conjugating $\frac{7\sqrt{2}}{\sqrt{6} + 8}$.

Pre-Calc. 11 LG 10B QUIZ (Formative Assessment)

Marking Teacher: _____

Name: _____

Student #: _____

1. Express the mixed radical as an entire radical.

a) $-2\sqrt{5}$

b) $2x\sqrt{3x^3}$

c) $2\sqrt[3]{2xy^2}$

2. Express the entire radical as a mixed radical.

a) $\sqrt{60}$

b) $\sqrt[3]{16x^5}$

c) $\sqrt{8c^4d^5}$

3. Simplify and identify any restrictions where possible.

a) $5\sqrt{8} - \sqrt{18}$

b) $6\sqrt[3]{24t^5} + 2\sqrt[3]{27t^8}$

4. Order from the least to the greatest.

8, $2\sqrt{8}$, $3\sqrt{4}$

5. Multiply, then simplify.

a) $2\sqrt{3}(-4\sqrt{5})$

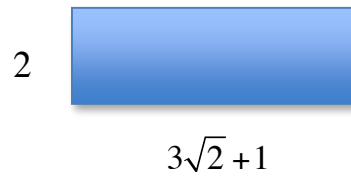
b) $3\sqrt[3]{2}(2\sqrt[3]{5x})$

6. Expand and simplify.

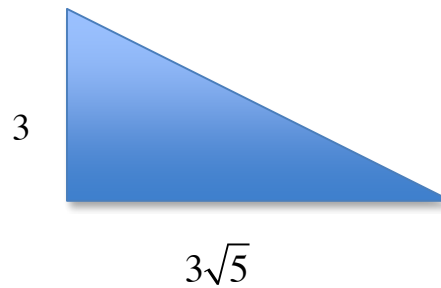
$$(3 - 4\sqrt{2})(3 + 4\sqrt{2})$$

7. Simplify by rationalizing $\frac{-2\sqrt{5}}{\sqrt{8}}$.

8. Find the exact area of the rectangle.



9. Find the exact area of the triangle.



10. Simplify by conjugating $\frac{5\sqrt{2}}{2 - \sqrt{3}}$.