Algebra 1 Bellwork Friday, May 15, 2015

Simplify each. Make sure answers don't have any exponents that are zero or negative.

1. $\sqrt{289b^{14}}$

2. $\sqrt[3]{125g^{24}}$

3. $\sqrt[4]{81w^{20}x^{44}}$

4. $\sqrt{92a^7}$

5. $\sqrt[3]{128k^{11}}$

6. $\sqrt{13} \cdot \sqrt{7}$

7. $\sqrt{20} \cdot \sqrt{20}$

8. $\sqrt{10} \cdot \sqrt{35}$

9. $\sqrt{18m^7p^3} \cdot \sqrt{30m^8p^{13}}$

Algebra 1 Bellwork Friday, May 15, 2015 ANSWERS

Simplify each. Make sure answers don't have any exponents that are zero or negative.

1. $\sqrt{289b^{14}}$

$= 17b^7$

2. $\sqrt[3]{125g^{24}}$

$= 5g^8$

3. $\sqrt[4]{81w^{20}x^{44}}$

$= 3w^5x^{11}$

4. $\sqrt{92a^7}$

$\sqrt{4 \cdot 23}$

$= 2a^3\sqrt{23a}$

5. $\sqrt[3]{128k^{11}}$

$\sqrt[3]{64 \cdot 2}$

$= 4k^3\sqrt[3]{2k^2}$

6. $\sqrt{13} \cdot \sqrt{7}$

$= \sqrt{91}$

7. $\sqrt{20} \cdot \sqrt{20}$

$= 20$

8. $\sqrt{10} \cdot \sqrt{35}$

$= \sqrt{350}$

$= \sqrt{25 \cdot 14}$

$= 5\sqrt{14}$

9. $\sqrt{18m^7p^3} \cdot \sqrt{30m^8p^{13}}$

$= \sqrt{540m^{15}p^{16}}$

$\sqrt{36 \cdot 15}$

$= 6m^7p^8\sqrt{15m}$