Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Accel Geom/Adv Alg

Date \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Period \_\_\_\_ Benchmark 2 Review A

**Simplify each radical.**

1. $\frac{3}{4}\sqrt{-40}$ 2) $6i\sqrt{-36}$ 3) $\sqrt[3]{-32x^{7}}$

**Find the values of x and y that make each equation true.**

4) $-4\left(x-5\right)-\left(18yi\right)=28+45i$

**Simplify the following.**

5) $-4i^{19}$ 6) $7+i^{20}+4i^{14}$ 7) $8i^{25}-2i^{55}$

**Simplify.**

8) $\left(9-4i\right)-5\left(1+8i\right)$ 9) $\left(-3+10i\right)\left(1+2i\right)^{2}$

10) $-4\left(5i-2\right)+7i\left(-9-2i\right)$ 11) $ \frac{5-2i}{1+7i}$

**Simplify.**

12) $\sqrt[4]{90x^{11}y^{20}}$ 13) $\sqrt[3]{\frac{32}{27p^{12}}}$ 14) $\frac{125^{\frac{8}{3}}}{125^{\frac{10}{3}}}$

15) $\sqrt[5]{x^{8}}∙\left(xy^{20}\right)^{\frac{3}{4}}$ 16) $\frac{\sqrt[6]{x^{8}}}{x}$ 17) $\left(-8\right)^{\frac{-5}{3}}$

18) $\sqrt{\frac{10x^{9}}{35x^{4}}}$ 19) $\sqrt[3]{\frac{x^{27}}{5}}$ 20) $\left(8x^{6}\right)^{\frac{1}{3}}∙\left(9x^{10}\right)^{\frac{1}{2}}$