Geometry Name Key ID: 1

Dividing Radicals

Date _____ Period ____

Simplify.

1) $\frac{\sqrt{20}}{\sqrt{5}} = \frac{\sqrt{4}}{1} = \boxed{2}$

$\sqrt{\frac{20}{5}}$

2) $\frac{3\sqrt{8}}{\sqrt{100}} = \frac{3\sqrt{2}}{\sqrt{25}} = \boxed{\frac{3\sqrt{2}}{5}}$

$\frac{3\sqrt{8}}{\sqrt{100}} = \frac{3\sqrt{16}\sqrt{2}}{10} = \boxed{\frac{3\sqrt{2}}{5}}$

8
4 · 2
2 · 2
$3 \cdot 2\sqrt{2}$

3) $\frac{3\sqrt{15}}{5\sqrt{125}} = \frac{3\sqrt{3}}{5\cdot\sqrt{25}} = \boxed{\frac{3\sqrt{3}}{25}}$

4) $\frac{\sqrt{20}}{4\sqrt{5}} = \frac{\sqrt{4}}{4} = \frac{2}{4} = \boxed{\frac{1}{2}}$

5) $\frac{\sqrt{6}}{5\sqrt{12}}$ not helpful this way!

So . . .

$\frac{\sqrt{6}}{5\sqrt{4}} = \frac{\sqrt{6}}{5\cdot 2} = \boxed{\frac{\sqrt{6}}{10}}$

6) $\frac{2\sqrt{15}}{3\sqrt{12}} = \frac{2\sqrt{5}}{3\sqrt{4}} = \frac{2\sqrt{5}}{6} = \boxed{\frac{\sqrt{5}}{3}}$