

Rationalizing Denominators Worksheet

Name _____

HW #2

Simplify the first 15 perfect square roots.

$$\sqrt{1} = 1$$

$$\sqrt{25} = \underline{\hspace{2cm}}$$

$$\sqrt{9} = \underline{\hspace{2cm}}$$

$$\sqrt{4} = 2$$

$$\sqrt{100} = \underline{\hspace{2cm}}$$

$$\sqrt{64} = \underline{\hspace{2cm}}$$

$$\sqrt{121} = \underline{\hspace{2cm}}$$

$$\sqrt{36} = \underline{\hspace{2cm}}$$

$$\sqrt{196} = \underline{\hspace{2cm}}$$

$$\sqrt{81} = \underline{\hspace{2cm}}$$

$$\sqrt{16} = \underline{\hspace{2cm}}$$

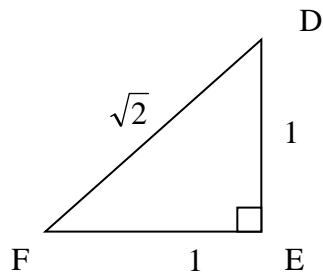
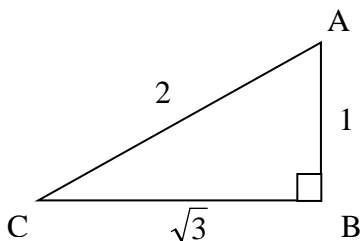
$$\sqrt{49} = \underline{\hspace{2cm}}$$

$$\sqrt{144} = \underline{\hspace{2cm}}$$

$$\sqrt{225} = \underline{\hspace{2cm}}$$

$$\sqrt{169} = \underline{\hspace{2cm}}$$

Find each ratio. Rationalize the denominator when possible.



a.) $\frac{AB}{AC} =$

d.) $\frac{AB}{CB} =$

g.) $\frac{DF}{FE} =$

b.) $\frac{DE}{EF} =$

e.) $\frac{BC}{AC} =$

h.) $\frac{AC}{AB} =$

c.) $\frac{EF}{DF} =$

f.) $\frac{DE}{DF} =$

i.) $\frac{AC}{CB} =$

Rationalize each denominator and write in simplest form.

1. $\frac{1}{\sqrt{2}}$

2. $\frac{2}{\sqrt{3}}$

3. $\frac{1}{\sqrt{7}}$

4. $\frac{6}{\sqrt{2}}$

5. $\frac{15}{\sqrt{5}}$

6. $\frac{42}{\sqrt{7}}$

7. $\frac{1}{\sqrt{81}}$

8. $\frac{2}{\sqrt{11}}$

9. $\frac{4}{\sqrt{2}}$

10. $\frac{1}{\sqrt{3}}$

11. $\frac{1}{\sqrt{225}}$

12. $\frac{1}{3\sqrt{16}}$

13. $\frac{8}{3\sqrt{2}}$

14. $\frac{2}{\sqrt{3}}$

15. $\frac{1}{\sqrt{2}}$

16. $\frac{1}{\sqrt{12}}$

17. $\frac{11}{\sqrt{121}}$

18. $\frac{12}{\sqrt{36}}$