

(C1-1.8a) Name:

Homework Questions 8 – Rationalising the Denominator

1. Rationalise the denominators on the following expressions

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

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

b) $\frac{2\sqrt{10}}{\sqrt{125}}$

$$\sqrt{2}$$

c) $\frac{12\sqrt{12}}{8\sqrt{6}}$

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

d) $\frac{3\sqrt{18}}{4\sqrt{24}}$

$$\frac{9\sqrt{3}}{4}$$

e) $\frac{2\sqrt{8}}{6\sqrt{6}}$

$$\frac{2\sqrt{3}}{9}$$

f) $\frac{4}{8 + \sqrt{20}}$

$$\frac{8 - 2\sqrt{5}}{11}$$

g) $\frac{\sqrt{10} + \sqrt{50}}{\sqrt{5}}$

$$2\sqrt{5}$$

h) $\frac{\sqrt{12} + \sqrt{20}}{\sqrt{5}}$

$$4\sqrt{15}$$

i) $\frac{\sqrt{6}}{\sqrt{5} + \sqrt{2}}$

$$\frac{\sqrt{30} - 2\sqrt{3}}{3}$$

j) $\frac{\sqrt{3} + \sqrt{2}}{\sqrt{3} + \sqrt{2}}$

$$1$$