

Answers

1 a $3\sqrt{5}$
 c $4\sqrt{3}$
 e $10\sqrt{3}$
 g $6\sqrt{2}$

b $5\sqrt{5}$
 d $5\sqrt{7}$
 f $2\sqrt{7}$
 h $9\sqrt{2}$

2 a $15\sqrt{2}$
 c $3\sqrt{2}$
 e $6\sqrt{7}$

b $\sqrt{5}$
 d $\sqrt{3}$
 f $5\sqrt{3}$

3 a -1
 c $10\sqrt{5}-7$

b $9-\sqrt{3}$
 d $26-4\sqrt{2}$

4 a $\frac{\sqrt{5}}{5}$
 c $\frac{2\sqrt{7}}{7}$
 e $\sqrt{2}$
 g $\frac{\sqrt{3}}{3}$

b $\frac{\sqrt{11}}{11}$
 d $\frac{\sqrt{2}}{2}$
 f $\sqrt{5}$
 h $\frac{1}{3}$

5 a $\frac{3+\sqrt{5}}{4}$

b $\frac{2(4-\sqrt{3})}{13}$

c $\frac{6(5+\sqrt{2})}{23}$

6 $x-y$

7 a $3+2\sqrt{2}$

b $\frac{\sqrt{x}+\sqrt{y}}{x-y}$