

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