1. $\sqrt{\left(2-\sqrt{2}\right)^2}-\sqrt{\left(1-\sqrt{2}\right)^2}$ 을 간단히 하면?

① 1　② -1　③ $3-2\sqrt{2}$

④ $-3+2\sqrt{2}$　⑤ $1-2\sqrt{3}$

해설

$1<\sqrt{2}<2$ 이므로 $2-\sqrt{2}>0,\ 1-\sqrt{2}<0$

$$\left|2-\sqrt{2}\right|-\left|1-\sqrt{2}\right|=2-\sqrt{2}+1-\sqrt{2}$$
$$=3-2\sqrt{2}$$

2. $\sqrt{\left(3-2\sqrt{2}\right)^2}-\sqrt{\left(2\sqrt{2}-3\right)^2}$ 을 간단히 하면?

① $6-4\sqrt{2}$ ② $-4\sqrt{2}$ ③ 6

④ 0 ⑤ $-6+4\sqrt{2}$

해설

$3>2\sqrt{2}$ 이므로

$\left|3-2\sqrt{2}\right|-\left|2\sqrt{2}-3\right|$

$=3-2\sqrt{2}+2\sqrt{2}-3=0$