Usuń niewymierność z mianownika

$$(1) \quad \frac{1}{\sqrt{2}}$$

(2) 
$$\frac{1}{\sqrt{3}}$$

(3) 
$$\frac{1}{\sqrt{7}}$$

(1) 
$$\frac{1}{\sqrt{2}}$$
 (2)  $\frac{1}{\sqrt{3}}$  (3)  $\frac{1}{\sqrt{7}}$  (4)  $\frac{1}{\sqrt{4}}$ 

$$(5) \quad \frac{\sqrt{2}}{\sqrt{3}}$$

$$(6) \quad \frac{\sqrt{2}+1}{\sqrt{5}}$$

(5) 
$$\frac{\sqrt{2}}{\sqrt{3}}$$
 (6)  $\frac{\sqrt{2}+1}{\sqrt{5}}$  (7)  $\frac{\sqrt{2}+\sqrt{3}}{\sqrt{7}}$  (8)  $\frac{\sqrt{7}-2}{\sqrt{2}}$ 

$$(8) \quad \frac{\sqrt{7}-2}{\sqrt{2}}$$

$$(9) \quad \frac{2 - \sqrt{11}}{\sqrt{3}}$$

$$(10) \quad \frac{3\sqrt{3}}{\sqrt{2}}$$

(9) 
$$\frac{2-\sqrt{11}}{\sqrt{3}}$$
 (10)  $\frac{3\sqrt{3}}{\sqrt{2}}$  (11)  $\frac{3\sqrt{7}-2\sqrt{2}}{3\sqrt{2}}$  (12)  $\frac{-\sqrt{7}-1}{-\sqrt{2}}$ 

$$(12) \quad \frac{-\sqrt{7} - 1}{-\sqrt{2}}$$

(13) 
$$\frac{1}{\sqrt{2}+1}$$

(14) 
$$\frac{1}{\sqrt{2}-1}$$

(15) 
$$\frac{\sqrt{2}}{\sqrt{5}-1}$$

(13) 
$$\frac{1}{\sqrt{2}+1}$$
 (14)  $\frac{1}{\sqrt{2}-1}$  (15)  $\frac{\sqrt{2}}{\sqrt{5}-1}$  (16)  $\frac{3\sqrt{2}}{\sqrt{7}+3}$ 

$$(17) \quad \frac{2\sqrt{3} - 4}{1 - \sqrt{2}}$$

$$(18) \quad \frac{\frac{1}{2} + \sqrt{2}}{\sqrt{2} - 2}$$

(19) 
$$\frac{\sqrt{2} - \sqrt{3}}{\sqrt{5} - \sqrt{7}}$$

(17) 
$$\frac{2\sqrt{3}-4}{1-\sqrt{2}}$$
 (18)  $\frac{\frac{1}{2}+\sqrt{2}}{\sqrt{2}-2}$  (19)  $\frac{\sqrt{2}-\sqrt{3}}{\sqrt{5}-\sqrt{7}}$  (20)  $\frac{\sqrt{3}-3\sqrt{2}}{\sqrt{7}+2\sqrt{3}}$ 

Oblicz

$$(21) \quad \left(\frac{3+\sqrt{2}}{2}\right)$$

$$(22) \quad \left(\frac{1+\sqrt{3}}{\sqrt{2}}\right)$$

(23) 
$$3 \cdot \sqrt[3]{27} + 3$$

(24) 
$$\frac{1}{8} \left( 4 - \frac{\sqrt{2}}{3} \right)^2$$

(25) 
$$-\left[\sqrt{2} - \sqrt{3} \cdot (\sqrt{6} - 1)\right]$$
 (26)  $(\sqrt{2} + \sqrt{3})(\sqrt{2} - \sqrt{3})$ 

(26) 
$$(\sqrt{2} + \sqrt{3})(\sqrt{2} - \sqrt{3})$$

$$(27) \ (3 \cdot 3^{\frac{1}{2}} + 3^{\frac{1}{3}}) \cdot \sqrt{3}$$