

$$f) \sqrt{-3} = \sqrt{-1} \cdot \sqrt{3}$$

$$i\sqrt{3} = i\sqrt{-1} \cdot \sqrt{3}$$

$$\boxed{i^2 = -1}$$

$$g) \sqrt{21}$$



$$-1\sqrt{21} \text{ or } -\sqrt{21}$$

$$\boxed{i = \sqrt{-1}}$$

$$g) \sqrt{-25} \cdot \sqrt{-1}$$

$$5i \cdot i$$

$$5i^2$$

$$5 \cdot -1$$

$$= -5$$

$$h) \sqrt{27} \cdot \sqrt{-3}$$

$$3\sqrt{3} \cdot i\sqrt{-3}$$

$$3\sqrt{3} \cdot i\sqrt{3}$$

$$3i \cdot 3 = 9i$$

$$i) \frac{\sqrt{-8}}{\sqrt{2}} = \frac{i\sqrt{8}}{\sqrt{2}} = i \cdot \sqrt{\frac{8}{2}} = i \cdot \sqrt{4} = 2i$$