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$$a, \quad 15^\circ \hat{=} \frac{15}{360} \cdot 2\pi = \frac{1}{12} \pi$$

$$b, \quad \frac{\pi}{5} \hat{=} \frac{1}{5} \cdot 180^\circ = 36^\circ$$

$$c, \quad \frac{11}{6} \pi \hat{=} \frac{11}{6} \cdot 180^\circ = 11 \cdot 30^\circ = 330^\circ$$

$$d, \quad 120^\circ \hat{=} \frac{120}{180} \pi = \frac{2}{3} \pi$$

$$e, \quad 315^\circ \hat{=} \frac{315}{180} \pi = \frac{7}{4} \pi$$

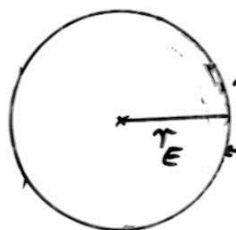
$$f, \quad \frac{5}{4} \pi \hat{=} \frac{5}{4} \cdot 180^\circ = 225^\circ$$

$$g, \quad 240^\circ \hat{=} \frac{240}{180} \pi = \frac{4}{3} \pi$$

$$h, \quad 0,82 \hat{=} \frac{0,82}{\pi} \cdot 180^\circ = 46,982\dots^\circ \approx 47,0^\circ$$

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$$r_E = 6370 \text{ km}$$



$$T = 1\frac{1}{2} h = 1,5 h$$

$$h = 280 \text{ km}$$

$$v = 2\pi \cdot (r_E + h) : 1,5 h = \frac{2\pi \cdot 6650 \text{ km}}{1,5 h} =$$

$$\approx 27855 \frac{\text{km}}{h} = \frac{27855, \dots}{3600} \frac{\text{km}}{s} \approx 7,74 \frac{\text{km}}{s}$$

In der Stunde legt der Satellit eine Strecke von 27855 km zurück!