

مثال: عدد  $2 + \sqrt{3}$  بین کدام دو عدد صحیح متوالی تکراری سردر  $3, 4$

$$1 = \sqrt{1} < \sqrt{3} < \sqrt{4} = 2 \Rightarrow 1 < \sqrt{3} < 2 \xrightarrow{+2} 4 < 2 + \sqrt{3} < 2 + 2 \\ 3 < 2 + \sqrt{3} < 4$$

مثال:  $3 - \sqrt{19}$  بین کدام دو عدد صحیح متوالی تکراری سردر  $3, 4$

$$4 = \sqrt{16} < \sqrt{19} < \sqrt{25} = 5 \Rightarrow 4 < \sqrt{19} < 5 \Rightarrow -5 < -\sqrt{19} < -4 \\ \Rightarrow -5 < -\sqrt{19} < -4 \\ \xrightarrow{+3} -5 + 3 < -\sqrt{19} + 3 < -4 + 3 \\ \Rightarrow -2 < -\sqrt{19} + 3 < -1$$

## مَدْرَسُطَلَق (بَرَقَاتِنِ تَامَسْفَرِ سَازِنِ)

$ a $	}	$a$	$a > 0$	مَثَل: $ 3  = 3$
		$0$	$a = 0$	$ 0  = 0$
		$-a$	$a < 0$	$ -3  = -(-3) = 3$

\*  $\sqrt{2} \approx 1,4$

$\sqrt{3} \approx 1,7$

$\sqrt{5} \approx 2,2$

$\sqrt{6} \approx 2,4$

$\sqrt{7} \approx 2,6$

$\sqrt{8} \approx 2,8$

مَثَل: حَاصِلِ عِبَارَاتِ زَبْرِ رَابِعُونَ اسْتَعْدَادِ مَدْرَسُطَلَقِ بِنُوْبِهِ.

①  $|2 - 3| = |-1| = -(-1) = +1$

②  $|2 \times (-3) - 5| = |-6 - 5| = |-11| = -(-11) = +11$

③  $|\overbrace{\sqrt{2}}^{+} - 1| = \sqrt{2} - 1$   
 $\swarrow$   
 $\approx 1,4$

④  $|2 - \overbrace{\sqrt{5}}^{-}| = -(+2 - \sqrt{5}) = -2 + \sqrt{5}$   
 $\swarrow$   
 $\approx 2,2$

⑤  $|\overbrace{\sqrt{2}}^{-} - \overbrace{\sqrt{3}}^{-}| = -(\sqrt{2} - \sqrt{3}) = -\sqrt{2} + \sqrt{3}$   
 $\swarrow$        $\searrow$   
 $\approx 1,4$        $\approx 1,7$

$$\textcircled{7} \quad \left| \underbrace{3\sqrt{2}}_{2\sqrt{2}} - \sqrt{2} - 3 \right| = \left| \overbrace{2\sqrt{2}}^{\approx 2 \times 1,4 = 2,8} - 3 \right| = - (2\sqrt{2} - 3) = -2\sqrt{2} + 3$$

$$\underline{6}: \quad 2\sqrt{2} = \sqrt{2^2 \times 2} = \sqrt{8}$$

$$3 = \sqrt{9}$$

$$\textcircled{8} \quad \left| \underbrace{1 - \sqrt{v}}_{-} \right| + \left| \underbrace{3 - \sqrt{v}}_{+} \right| =$$

$$= - (1 - \sqrt{v}) + (3 - \sqrt{v})$$

$$= -1 + \cancel{\sqrt{v}} + 3 - \cancel{\sqrt{v}} = -1 + 3 = 2$$

$$\textcircled{9} \quad \left| \overbrace{\sqrt{2}}^{\approx 1,4} - \underbrace{\pi}_{\approx 3,14} \right| = - (\sqrt{2} - \pi) = -\sqrt{2} + \pi$$

$$\textcircled{9} \quad \left| 1 - \sqrt{2} \right| - \left| -\sqrt{2} \right| + \left| 1 - \sqrt{3} \right|$$

$$= ( \quad ) - ( \quad ) + ( \quad )$$