

نام و نام خانوادگی رسا توپان پاسخنامه تشریحی تکلیف شماره ۳ کلاس ۱۰م دبیرستان B

الف) $y^3 - n = 2n^2 \rightarrow y^3 = 2n^2 + n \rightarrow y^3 = 2n^2 + n \rightarrow y^3 = 2n^2 + n \rightarrow y^3 = 2n^2 + n$
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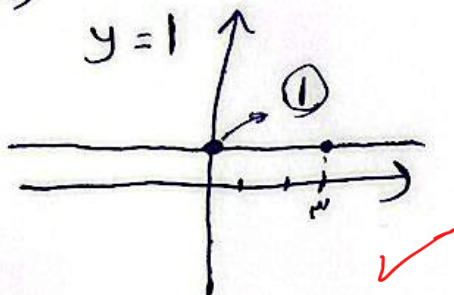
$y_1 = y_2$ ✓ تابع است

ب) $|y| + n^2 = n + 3 \rightarrow |y| = -n^2 + n + 3 \xrightarrow{n=0} |y| = 3 \rightarrow y = \pm 3$ ✓ تابع نیست

ج) $\sqrt{n-4} + |y-2| = 0 \rightarrow \sqrt{n-4} = -|y-2| \rightarrow \sqrt{n-4} = 0 \rightarrow n=4$ ✓ تابع است

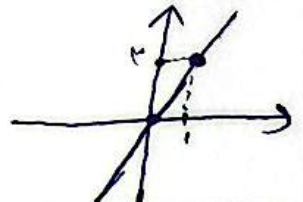
د) $n = \cos y \xrightarrow{n=0} \cos y = 0 \rightarrow y = \frac{\pi}{2}, \frac{3\pi}{2}$ ✓ تابع نیست

الف)



ب) $y = an + b \rightarrow 2 = a + b$

$a=2 \rightarrow b=0 \rightarrow y=2n$



الف) $y = an + b = n \quad a=1 \quad b=0$

$a+2b = 1+0 = 1$ ✓

ب) $n^2 + an + b$

$2 \rightarrow -\frac{a}{2} = 2 \rightarrow a = -4$ ✓

$n=1 \rightarrow \frac{-1}{4} \rightarrow \frac{a^2 - 4b}{-4} = 1$

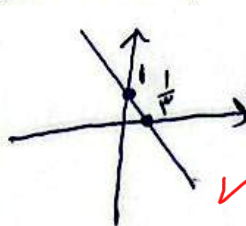
$a^2 - 4b = -4 \rightarrow 16 - 4b = -4 \rightarrow b = 5$

$a+2b = -4 + 10 = 6$

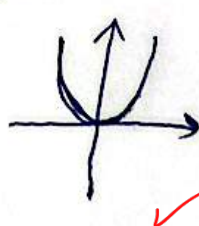
الف) $y = 2n + 1 \xrightarrow{y=0} n = -\frac{1}{2}$



ب) $y = -2n + 1 \xrightarrow{y=0} n = \frac{1}{2}$



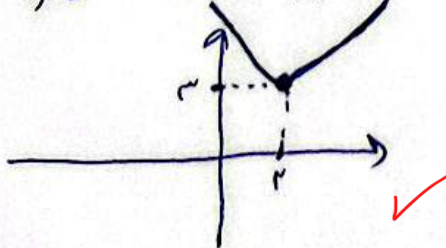
ج) $y = n^2$



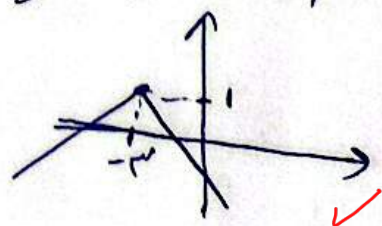
د) $y = n^3$



الف) $y = |n-2| + 3$



ب) $y = -|n+3| + 1$



$$1) m^r - fm \neq 0 \rightarrow m(m-r) \neq 0 \rightarrow Df = \mathbb{R} - \{0, f\}$$

$$2) m^r - \sqrt{m} + 19 \rightarrow \Delta < 0 \rightarrow Df = \mathbb{R}$$

$$3) m^r + m + f \neq 0 \rightarrow \Delta < 0 \rightarrow Df = \mathbb{R}$$

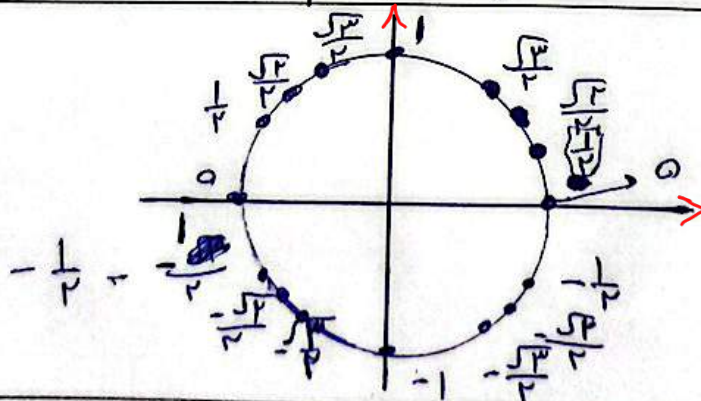
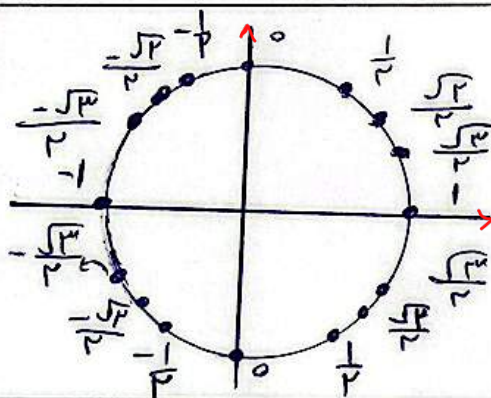
$$4) m^r - fm \neq 0 \quad m^r(m-r) \neq 0 \rightarrow m^r(m+r)(m-r) \neq 0 \rightarrow Df = \mathbb{R} - \{0, -r, r\}$$

$$5) 9 - m \geq 0 \rightarrow m - r \geq 0 \rightarrow r \leq m \leq 9 \rightarrow Df = [r, 9]$$

$$6) m^r + 1 \neq 0 \rightarrow Df = \mathbb{R}$$

$$7) m - r \geq 0 \rightarrow m \geq r \quad m - f \neq 0 \rightarrow Df = [r, +\infty) - \{f\}$$

$$8) |m| + m^r \neq 0 \rightarrow m \neq 0 \rightarrow Df = \mathbb{R} - \{0\}$$



$$9) \cos \frac{5\pi}{6} = -\frac{\sqrt{3}}{2} \rightarrow \sin \frac{\pi}{6}, \sin \frac{5\pi}{6} = \frac{1}{2}$$

$$10) \cos \frac{11\pi}{6} = \frac{\sqrt{3}}{2} \rightarrow \sin \frac{5\pi}{6}, \sin \frac{11\pi}{6} = -\frac{1}{2}$$