نام و نام خانوادگی ..... پاسخنامه تشریحی تکلیف شماره ..... کلاس .....

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$Q(5) \xrightarrow{\times 5} 5Q(5) \longrightarrow (a+1)\times 2 \longrightarrow 2Q(0) = 14a+14$

$Q(-2) \xrightarrow{\times -5} -5Q(-2) \longrightarrow -5a+10$

$\Rightarrow 2Q(0) = Q(-2) + 5a \longrightarrow 14a+14 = -5a+10+5a$

$10a = -14 \rightarrow a = \boxed{-\frac{7}{5}}$ — ۶

$$\sqrt{2-\sqrt{3}} + \frac{1}{\sqrt{2+\sqrt{3}}} + 2 + \sqrt{2+\sqrt{3}} + \frac{1}{\sqrt{2+\sqrt{3}}} + 2$$

$$= \frac{1-\sqrt{3}}{\sqrt{2-\sqrt{3}}} + \frac{\sqrt{3}+1}{\sqrt{2+\sqrt{3}}} + 4 = \frac{\sqrt{2+\sqrt{3}}(1-\sqrt{3})}{1} + \frac{\sqrt{2-\sqrt{3}}(\sqrt{3}+1)}{1} + 4$$

$$= \sqrt{2+\sqrt{3}} - \left(\sqrt{2+\sqrt{3}}\right)\times\sqrt{3} + \sqrt{2-\sqrt{3}} + \left(\sqrt{2-\sqrt{3}}\right)\times\sqrt{3} + 4$$

$$= 4$$

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$$2Q(x) - 3Q(-x) = 4x^2 - x \xrightarrow{\times 2} 4Q(x) - 6Q(-x) = 2x^2 - 2x$$

$$-x \rightarrow 2Q(-x) - 3Q(x) = 4x^2 + x \xrightarrow{\times 3} \underline{-9Q(x) + 6Q(-x) = 12x^2 + 3x}$$

$$-5Q(x) = 10x^2 + 5x$$

$$\xrightarrow{\div -5} Q(x) = \frac{10x^2+5x}{-5} = -2x^2 - \frac{x}{5}$$

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$$2Q(0) = 3m-1 \longrightarrow Q(0) = \frac{3m-1}{2}$$

$$x = -2 \rightarrow +4Q(0) = 4(-2)^2 + 5m - 1 \Rightarrow \frac{15+5m}{4} = Q(0)$$

$$\frac{15+5m}{4} = \frac{3m-1}{2} \xrightarrow{\times 4} 15+5m = 6m-2 \rightarrow m = 17$$

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$$x=1 \sim 2Q(1) = \frac{3-12+3}{1} \sim 2Q(1) = -6 \sim Q(1) = -3$$

$$x=-1 \sim 2Q(-1) = \frac{3+12+3}{-1} = -18 \sim \boxed{Q(-1) = -9}$$

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