نام و نام خانوادگی محمد صالح تقفیکی پاسخنامه تشریحی تکلیف شماره ۲۸ کلاس دهم سیستم

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$a^2 - 2 = a^2 + 2a$

$\boxed{a = -2}$

۲

$2 + b = \frac{2 + a}{2 - b} \rightarrow b = -1 \rightarrow a = 11$

$\frac{1 + 11}{2 + 1} = \boxed{4}$

۳

$2 - a + b = 0 = 3 \cdot 2 + 2a + b$

$-3a = 30$

$a = -5 \quad b = -1 \rightarrow \frac{5}{2 - 5 - 1} = \boxed{\frac{a}{-12}}$

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$-2 - a + b = 0$

$-2 + b = a$

$\frac{b}{2} = -1 \rightarrow b = -2 \quad a = -1 \rightarrow \boxed{a + b = -12}$

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$m^2 - 2 < 0 \rightarrow m^2 < 2 \rightarrow \boxed{m \leq 2 \cup m > -2}$

۶

$4 - \frac{1}{x^2} \geq 0 \rightarrow x \neq 0 \quad (-\infty, -\frac{1}{2}] \cup [\frac{1}{2}, +\infty)$

$4 \geq \frac{1}{x^2} \rightarrow x^2 \geq \frac{1}{4} \rightarrow x \geq \frac{1}{2} \cup x \leq -\frac{1}{2}$

~~$x^2 \rightarrow \frac{1}{4} \quad x \leq \frac{1}{2} \rightarrow D_f = [-\frac{1}{2}, \frac{1}{2}] - \{0\}$~~

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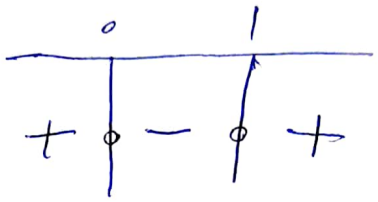
$mx^2 + 2mx + 1 \geq 0 \rightarrow 2m^2 - 2m = 0 \rightarrow m = 0$

$\rightarrow m = 1$



$\rightarrow m \in [1, +\infty) \cup \{0\}$

۸

$|x+1| = 2 + k$

$k \neq 0$

$2x - 1 = 0$

$x = \frac{1}{2} = a$

$\rightarrow \boxed{a + k = \frac{1}{2}}$

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$-2 + b = -2a + 2$

$2a + b = \frac{5}{3} \rightarrow b = -\frac{1}{3}$ $\rightarrow a = 3$

$\rightarrow 3 + 2 = \boxed{5}$

~~$a - b = 2a + 2$~~

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$2 = 2a^2 + 2a$

$\rightarrow 2a^2 + 2a - 4 = 0$

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

$\boxed{a = -2, 1}$