

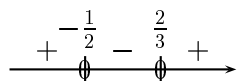
5.3

1) $6x^2 - x - 2 = 0$

$$\Delta = (-1)^2 - 4 \cdot 6 \cdot (-2) = 49 = 7^2 > 0$$

$$x_1 = \frac{-(-1)-7}{2 \cdot 6} = -\frac{1}{2} \quad x_2 = \frac{-(-1)+7}{2 \cdot 6} = \frac{2}{3}$$

$$\text{signe}(a) = \text{signe}(6) = +$$

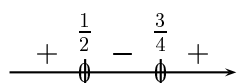


2) $8x^2 - 10x + 3 = 0$

$$\Delta = (-10)^2 - 4 \cdot 8 \cdot 3 = 4 = 2^2 > 0$$

$$x_1 = \frac{-(-10)-2}{2 \cdot 8} = \frac{1}{2} \quad x_2 = \frac{-(-10)+2}{2 \cdot 8} = \frac{3}{4}$$

$$\text{signe}(a) = \text{signe}(8) = +$$

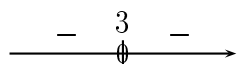


3) $-x^2 + 6x - 9 = 0$

$$\Delta = 6^2 - 4 \cdot (-1) \cdot (-9) = 0$$

$$x_1 = \frac{-6}{2 \cdot (-1)} = 3$$

$$\text{signe}(a) = \text{signe}(-1) = -$$

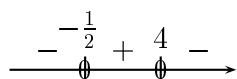


4) $-2x^2 + 7x + 4 = 0$

$$\Delta = 7^2 - 4 \cdot (-2) \cdot 4 = 81 = 9^2 > 0$$

$$x_1 = \frac{-7+9}{2 \cdot (-2)} = -\frac{1}{2} \quad x_2 = \frac{-7-9}{2 \cdot (-2)} = 4$$

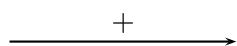
$$\text{signe}(a) = \text{signe}(-2) = -$$



5) $25x^2 - 30x + 34 = 0$

$$(-30)^2 - 4 \cdot 25 \cdot 34 = -2500 < 0$$

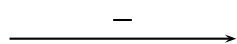
$$\text{signe}(a) = \text{signe}(25) = +$$



6) $-3x^2 + 24x - 60 = 0$

$$\Delta = 24^2 - 4 \cdot (-3) \cdot (-60) = -144 < 0$$

$$\text{signe}(a) = \text{signe}(-3) = -$$

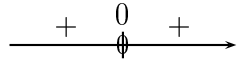


$$7) \ 6x^2 = 0$$

$$\Delta = 0^2 - 4 \cdot 6 \cdot 0 = 0$$

$$x_1 = \frac{-0+0}{2 \cdot 6} = 0$$

$$\text{signe}(a) = \text{signe}(6) = +$$

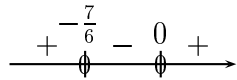


$$8) \ 6x^2 + 7x = 0$$

$$\Delta = 7^2 - 4 \cdot 6 \cdot 0 = 49 = 7^2 > 0$$

$$x_1 = \frac{-7-7}{2 \cdot 6} = -\frac{7}{6} \quad x_2 = \frac{-7+7}{2 \cdot 6} = 0$$

$$\text{signe}(a) = \text{signe}(6) = +$$



$$9) \ 8x^2 - 25 = 0$$

$$\Delta = 0^2 - 4 \cdot 8 \cdot (-25) = 800 = 20^2 \cdot 2 > 0$$

$$x_1 = \frac{-0-20\sqrt{2}}{2 \cdot 8} = -\frac{5\sqrt{2}}{4} \quad x_2 = \frac{-0+20\sqrt{2}}{2 \cdot 8} = \frac{5\sqrt{2}}{4}$$

$$\text{signe}(a) = \text{signe}(8) = +$$

