

① Solve: $6x^2 - 10x = 3x - 5$

$$6x^2 - 13x + 5 = 0$$

$$(2x - 1)(3x - 5) = 0$$

$$x = \frac{1}{2}, \frac{5}{3}$$

- A) $-\frac{1}{2}, -\frac{5}{3}$
- B) $-\frac{1}{3}, \frac{5}{2}$
- C) $\frac{2}{3}, \frac{5}{2}$
- D) $\frac{1}{3}, -\frac{5}{2}$
- E) $\frac{1}{2}, \frac{5}{3}$

② Find the distance between $(5, 3.5)$ and $(-2, -2.5)$

$$d = \sqrt{(3.5 - (-2.5))^2 + (5 - (-2))^2}$$

$$d = \sqrt{36 + 49}$$

$$d = \sqrt{85}$$

- A) 2
- B) $\sqrt{13}$
- C) $\sqrt{85}$
- D) 13

③ Solve: $\frac{2x}{3} = \frac{10}{x-2}$

$$2x^2 - 4x = 30$$

$$2x^2 - 4x - 30 = 0$$

$$2(x^2 - 2x - 15) = 0$$

$$2(x - 5)(x + 3) = 0$$

$$x = 5, -3$$

- A) ~~8, -3~~
- B) ~~-5, 3~~
- C) ~~-4, 0~~
- D) ~~±2~~
- E) $-3, 5$

④ SIMPLIFY:

$$\sqrt{24} + 5\sqrt{6} - \sqrt{54}$$

$$2\sqrt{6} + 5\sqrt{6} - 3\sqrt{6}$$

$$4\sqrt{6}$$

- A) $10\sqrt{2}$
- B) $4\sqrt{6}$
- C) $5 - \sqrt{24}$
- D) $10\sqrt{6}$