

$$(a) \quad |3x + 1| = 7 \qquad x = -\frac{8}{3}, 2$$

$$(b) \quad |2x + 1| = x + 2 \qquad x = -1, 1$$

$$(c) \quad |x - 2| = 3x - 4 \qquad x = \frac{3}{2}$$

$$(d) \quad |3x + 3| = |2x - 5| \qquad x = -8, \frac{2}{5}$$

$$(e) \quad |2 - x| = 3x + 1 \qquad x = \frac{1}{4}$$

$$\text{Extension}^*: \quad |x| = |x^2 - x - 2| \qquad x = \pm\sqrt{2}, 1 \pm \sqrt{3}$$