

	Final exam practice sheet #1	Answers
1	Solve for x, write your answer in interval form: $21 < 2x - 3$ or $3 \leq -x + 2$	$(-\infty, -1] \cup (12, \infty)$
2	Solve for x: $-\frac{5x}{3} + \frac{7}{6} < \frac{1}{2}$	$x > \frac{2}{5}$
3	Solve for x: $x^2 = 7x - 2$	$\frac{7 \pm \sqrt{41}}{2}$
4	Solve for x: $2x^2 - 15 = -7x$	$x = \frac{3}{2}, x = -5$
5	Solve for x: $4x = 5 - ax$	$\frac{5}{4 + a}$
6	Solve for x: $3(x + 2) + 5 = 2x - (x - 2)$	$x = -\frac{9}{2}$
7	Solve for x: $5x^2 - 2x = 0$	$x = 0, x = \frac{2}{5}$
8	Simplify: $\sqrt[3]{x^{11}y^{21}}$	$x^3y^7\sqrt[3]{x^2}$
9	Rationalize the denominator: $\frac{2+\sqrt{3}}{5-\sqrt{3}}$	$\frac{13 + 7\sqrt{3}}{22}$
10	Solve for x: $3(x + 2)^2 = 15$	$-2 \pm \sqrt{5}$