

## Homework

Complete #'s 3, 5, and 4 other problems of your choice.

Write in Standard Form:

$$1. y = \frac{2}{12}x - \frac{5}{72}$$

$$2. 16y - 4 = 4x$$

$$3. -\frac{4}{5}x + \frac{5}{6} = -\frac{6}{7}y$$

$$4. y = -\frac{7}{8}x - 12$$

$$5. \frac{1}{7}y = -\frac{3}{4}x + \frac{31}{6}$$

$$6. y = \frac{11}{7}x + \frac{13}{14}$$

$$7. y = \frac{25}{3}x + \frac{31}{6}$$

$$8. \frac{13}{7}y = \frac{17}{49}x + 13$$

$$9. y = -7x - \frac{3}{2}$$

$$10. y = \frac{3}{7}x + \frac{11}{6}$$

$$11. -\frac{5}{6}x + 15 = \frac{12}{18}y$$

$$12. 12y = \frac{3}{4}x + \frac{3}{6}$$

$$13. 4y = -\frac{12}{3}x + \frac{2}{4}$$

$$14. 9y = \frac{2}{7}x - \frac{3}{4}$$

$$15. 5y = \frac{2}{3}x - \frac{70}{4}$$

$$16. -\frac{1}{3}x - \frac{5}{8} = \frac{2}{7}y$$

$$17. \frac{5}{11}x + 13 = y$$

$$18. \frac{9}{1001}y - \frac{x}{151} = \frac{1562}{139} + \frac{96}{59}y$$

$$1. \quad 12 \left[ y = \frac{2}{12}x - \frac{5}{12} \right]$$

$$12y = 12x - 5$$
$$\begin{array}{r} -12x \quad -12x \\ \hline \end{array}$$

$$-1 \left[ -12x + 12y = -5 \right]$$

$$12x - 12y = 5$$

$$2. \quad 16y - 4 = 4x$$

$$\begin{array}{r} -16y \quad -16y \\ \hline \end{array}$$

$$-4 = 4x - 16y$$

$$\frac{4x - 16y}{4} = \frac{-4}{4}$$

$$x - 4y = -1$$

$$3. \quad -210 \left[ -\frac{4}{5}x + \frac{5}{6} = -\frac{6}{7}y \right]$$

$$168x - 175 = 180y$$
$$\begin{array}{r} +175 \quad +175 \\ \hline \end{array}$$

$$168x = 180y + 175$$
$$\begin{array}{r} -180y \quad -180y \\ \hline \end{array}$$

$$168x - 180y = 175$$

$$4. \quad 8 \left[ y = -\frac{7}{8}x - 12 \right]$$

$$8y = -7x - 96$$

$$\begin{array}{r} +7x \quad +7x \\ \hline \end{array}$$

$$7x + 8y = -96$$

$$5. \quad 168 \left[ \frac{1}{7}y = -\frac{3}{4}x + \frac{31}{6} \right]$$

$$24y = -126x + 868$$
$$\begin{array}{r} +126x \quad +126x \\ \hline \end{array}$$

$$\frac{126x + 24y}{2} = \frac{868}{2}$$

$$63x + 12y = 434$$

$$6. \quad 14 \left[ y = \frac{11}{7}x + \frac{13}{14} \right]$$

$$14y = 22x + 13$$

$$\begin{array}{r} -22x \quad -22x \\ \hline \end{array}$$

$$-1 \left( -22x + 14y = 13 \right)$$

$$22x - 14y = -13$$

$$7. \quad 6 \left[ y = \frac{25}{3}x + \frac{31}{6} \right]$$

$$6y = 50x + 31$$
$$\begin{array}{r} -50x \quad -50x \\ \hline \end{array}$$

$$-1 \left[ -50x + 6y = 31 \right]$$

$$50x - 6y = -31$$

$$8. \quad 49 \left[ \frac{13}{7}y = \frac{17}{49}x + 13 \right]$$

$$91y = 17x + 637$$
$$\begin{array}{r} -17x \quad -17x \\ \hline \end{array}$$

$$-1 \left[ -17x + 91y = 637 \right]$$

$$17x - 91y = -637$$

$$9. \quad 2 \left[ y = -7x - \frac{3}{2} \right]$$

$$2y = -14x - 3$$
$$\begin{array}{r} +14x \quad +14x \\ \hline \end{array}$$

$$14x + 2y = -3$$

$$10. \quad 42 \left[ y = \frac{3}{7}x + \frac{11}{6} \right]$$

$$42y = 18x + 77$$
$$\begin{array}{r} -18x \quad -18x \\ \hline \end{array}$$

$$-1 \left[ -18x + 42y = 77 \right]$$

$$18x - 42y = 77$$

$$11. \quad -\frac{5}{6}x + 15 = \frac{12}{18}y$$

$$6 \left[ -\frac{5}{6}x + 15 = \frac{2}{3}y \right]$$

$$-5x + 90 = 4y$$
$$\begin{array}{r} +5x \quad +5x \\ \hline \end{array}$$

$$90 = 5x + 4y$$

$$5x + 4y = 90$$

$$12. \quad 12y = \frac{3}{4}x + \frac{3}{6}$$

$$-4 \left[ 12y = \frac{3}{4}x + \frac{1}{2} \right]$$

$$-48y = -3x - 2$$
$$\begin{array}{r} +3x \quad +3x \\ \hline \end{array}$$

$$3x - 48y = -2$$

$$13. \quad 4y = -\frac{12}{3}x + \frac{2}{4}$$

$$2 \left[ 4y = -4x + \frac{1}{2} \right]$$

$$8y = -8x + 1$$

$$\begin{array}{r} +8x \quad +8x \\ \hline \end{array}$$

$$\underline{8x + 8y = 1}$$

$$14. \quad 28 \left[ 9y = \frac{2}{7}x - \frac{3}{4} \right]$$

$$252y = 8x - 21$$

$$\begin{array}{r} -8x \quad -8x \\ \hline \end{array}$$

$$-1 \left[ -8x + 252y = -21 \right]$$

$$\underline{8x - 252y = 21}$$

$$15. \quad 12 \left[ 5y = \frac{2}{3}x - \frac{70}{4} \right]$$

$$60y = 8x - 210$$

$$\begin{array}{r} -8x \quad -8x \\ \hline \end{array}$$

$$\begin{array}{r} -8x + 60y = -210 \\ \hline \end{array}$$

$$\begin{array}{r} \frac{-8x}{-2} + \frac{60y}{-2} = \frac{-210}{-2} \\ \hline \end{array}$$

$$\underline{4x - 30y = 105}$$

$$16. \quad -168 \left[ -\frac{1}{3}x - \frac{5}{8} = \frac{2}{7}y \right]$$

$$56x + 105 = -48y$$

$$\begin{array}{r} +48y \quad +48y \\ \hline \end{array}$$

$$56x + 48y + 105 = 0$$

$$\begin{array}{r} -105 \quad -105 \\ \hline \end{array}$$

$$\underline{56x + 48y = -105}$$

$$17. \quad 11 \left[ \frac{5}{11}x + 13 = y \right]$$

$$5x + 143 = 11y$$

$$\begin{array}{r} -11y \quad -11y \\ \hline \end{array}$$

$$5x - 11y + 143 = 0$$

$$\begin{array}{r} -143 \quad -143 \\ \hline \end{array}$$

$$\underline{5x - 11y = -143}$$

$$18. \quad \frac{9}{1001}y - \frac{x}{151} = \frac{1562}{139} + \frac{96y}{59}$$

$$\begin{array}{r} -\frac{96}{59}y \quad -\frac{96}{59}y \\ \hline \end{array}$$

$$\begin{array}{r} -\frac{x}{151} - \frac{96}{59}y + \frac{9}{1001}y = \frac{-1962}{139} \\ \hline \end{array}$$

See next page

$$-1,239,589,351 \left[ \frac{-x}{151} - \frac{96}{59}y + \frac{9}{100}y = \frac{-192}{139} \right]$$

$$8,209,201x + 2,016,958,944y - 11,145,159y = -13,929,773,858$$

$$8,209,201x + 2,005,813,785y = -13,929,773,858$$