MTH – 4107 – 1
Straight Lines II

NAME:_____
DATE:_____

Supplementary Worksheet

1. Determine the equation of the line that passes through

   a) point $\left(-\frac{1}{3},7\right)$ and is parallel to the line whose equation is $-x-7=0$.
   Clearly show all your work.

   b) point $\left(-2,\frac{4}{5}\right)$ and is parallel to the line whose equation is $-\frac{7}{6}y+7=0$.
   Clearly show all your work.

c) point $\left(-\frac{1}{4},3\right)$ and is parallel to the line whose equation is $-7x-11=0$.
Clearly show all your work.

d) point $\left(-3,\frac{1}{3}\right)$ and is parallel to the line whose equation is $-\frac{4}{3}y+4=0$.
Clearly show all your work.

e) point $\left(-\frac{3}{5},6\right)$ and is parallel to the line whose equation is $-2x-4=0$.
Clearly show all your work.

f) point $\left(-4,\frac{3}{4}\right)$ and is parallel to the line whose equation is $-\frac{2}{3}y+6=0$.
Clearly show all your work.

g) point $\left(-\frac{1}{5},2\right)$ and is parallel to the line whose equation is $-3x-7=0$.
Clearly show all your work.

h) point $\left(-\frac{2}{5},\frac{1}{2}\right)$ and is parallel to the line whose equation is $-\frac{5}{4}y+10=0$.
Clearly show all your work.

i) point $\left(-\frac{5}{6},-2\right)$ and is parallel to the line whose equation is $-8x-16=0$.
Clearly show all your work.

j) point $\left(-\frac{1}{4},-\frac{4}{7}\right)$ and is parallel to the line whose equation is $-\frac{7}{2}y+14=0$.
Clearly show all your work.

Multiple choice: Choose the correct answer.

2. Which of the following lines is concurrent with l_1: $2y = 5$ in its intercept?

a) $y = \frac{5}{2}x$

b) $2y - 4x = 5$

c) $2y + 5 = 0$

d) $5y - 2x = 25$

3. Which of the following lines is concurrent with l_1: $5y = 10$ in its intercept?

a) $-10x + 5y - 1 = 0$

b) $5y + 10 = 0$

c) $2y - x = 1$

d) $-x + 5y - 10 = 0$

4. Which of the following lines is concurrent with l_1: $y = \frac{7}{2}$ in its intercept?

a) $2y - 7x = 4$

b) $\frac{7}{2}y = 1$

c) $y = \frac{7}{2}x$

d) $2y - 2x = 7$

5. Which of the following lines is concurrent with l_1: $2y = 6$ in its intercept?

a) $-2x + y - 3 = 0$

b) $-3x + y - 1 = 0$

c) $2y + 6 = 0$

d) $y = 3x$

6. Which of the following lines is concurrent with l_1: $3y = 12$ in its intercept?

a) $3y + 12 = 0$

b) $y - x = 4$

c) $y - 4x = 1$

d) $x - 4 = 0$

7. Which of the following lines is concurrent with l_1: $2y = 10$ in its intercept?

a) $5y - 25x = 1$

b) $y = \frac{2}{10}x$

c) $3y - 2x = 15$

d) $2y + 10 = 0$

8. Determine what line is concurrent with l_1: $-\frac{4}{3}x = 4$ in point $(-3,-3)$?

a) $y = -3x - 3$

b) $y - x + 6 = 0$

c) $3y - 2x - 15 = 0$

d) $y - 2x = 3$

9. Determine what line is concurrent with l_1: $-\frac{9}{4}x = 9$ in point $(-4,-2)$?

a) $4y - x + 4 = 0$

b) $y = -4x - 2$

c) $2y - 3x + 2 = 0$

d) $4y - 3x - 20 = 0$

10. Determine what line is concurrent with l_1: $-\frac{7}{5}x = 7$ in point $(-5,-3)$?

a) $3y - 2x + 9 = 0$

b) $2x - 2y = -16$

c) $-4x + 5y - 5 = 0$

d) $y = -5x - 3$

11. Determine what line is concurrent with l_1: $-\frac{5}{2}x = 5$ in point $(-2,3)$?

a) $2y - x = 8$

b) $3y - 2x + 12 = 0$

c) $2y - 3x = 0$

d) $-2x + 3y = 0$

12. Determine what line is concurrent with l_1: $-\frac{11}{6}x = 11$ in point $(-6,4)$?

a) $3x + 4y + 12 = 0$

b) $5x + 6y + 6 = 0$

c) $3y - 2x = 0$

d) $-6x + 4y = 0$

13. Determine what line is concurrent with l_1: $-\frac{8}{7}x = 8$ in point $(-7,-2)$?

a) $-2x - 5y = 4$

b) $-x - 2y = 3$

c) $2y - 5x + 4 = 0$

d) $7y - 5x = 21$