Adult High School – Registration Assessment #2 – Sample Questions
(*Note: calculators are not needed*)

1.) $5x - 2y + 3x$ = _____

2.) $7w - (3x - 8)$ = _____

3.) $8xy - 5yx$ = _____

4.) $4(2n + 5)$ = _____

5.) $-3(4n - 1)$ = _____

6.) $15x - 18xy$ = _____(_____)

7.) $(3a^2b^3)(2a^5b)$ = _____

8.) $18x^7 \div 2x^3$ = _____

9.) $(5a^7b^2)^2$ = _____

10.) $7y + 10 = 31$ y = _____

11.) $3(m + 2) = 21 - 2m$

          m = _____

12.) $\dfrac{w}{3} - \dfrac{w}{8} = -\dfrac{1}{24}$ w = _____

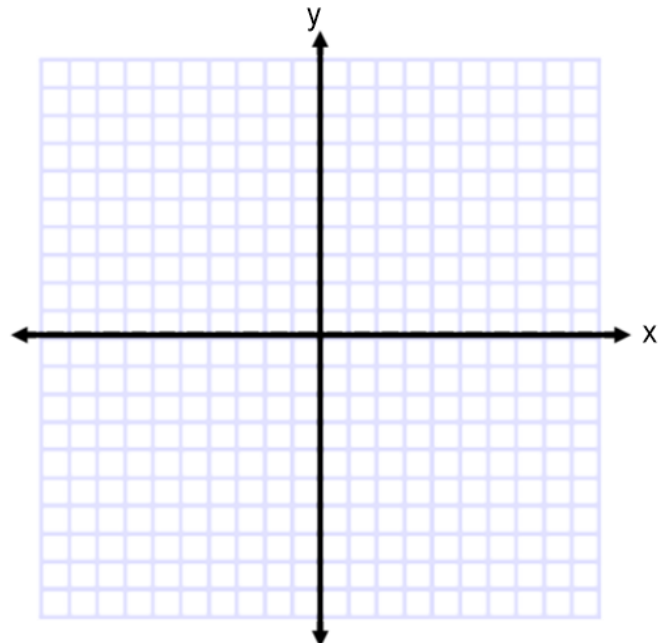13.) $(p + q)^2$ = _____

14.) $(x + 3y)^2$ = _____

15.) $(a - 3)(a + 5)$ = _____

16.) $(y - 4)(y + 4)$ = _____

17.) $x^2 - 9$ = (_____)(_____)

18.) Plot the table of points on the grid:

x	y
–2	–7
0	–3
1	–1
4	5

19.) For the line shown below,

slope (m) = _____

equation is: _____

(−3, 3)

(0, 1)

(3, −1)
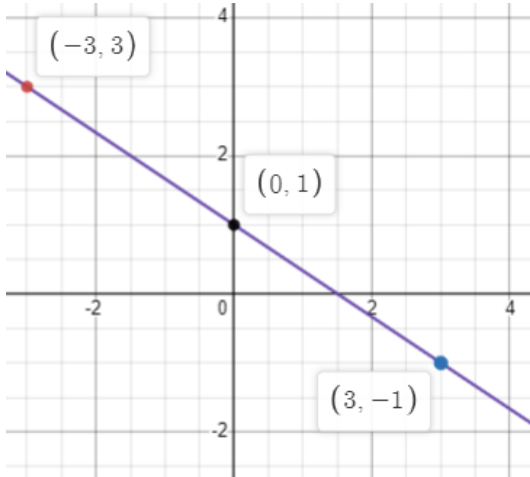
20.) Sketch a line with equation $y = \frac{2}{5}x + 3$
It has y-intercept (b) = 2 and slope (m) = $\frac{2}{5}$
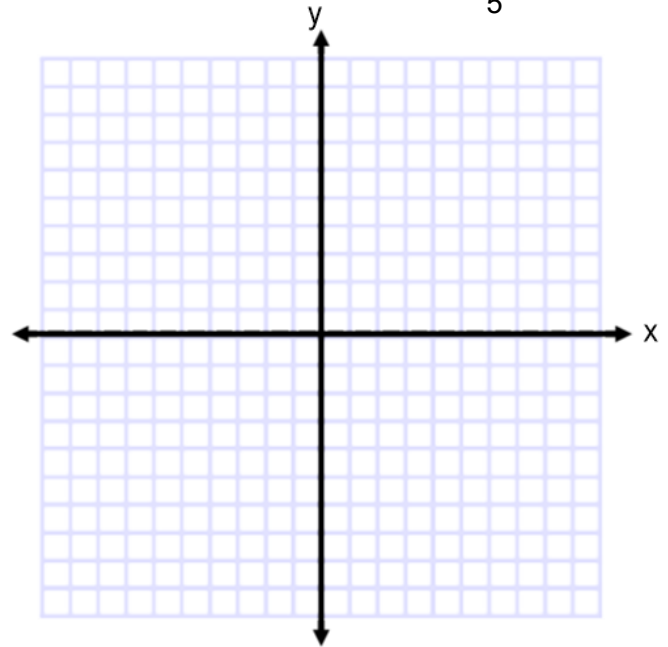
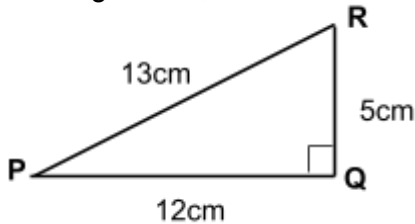23.) Graph these equations: a) y =7   b) x = −4   c) 2x + 3y = 12   d) 5x − 4y = 10

22.) For triangle PQR,

R

13cm

5cm

P

Q

12cm

sin P = _____   sin R = _____

cos P = _____   cos R = _____

tan P = _____   tan R = _____

23.) The quadratic equation y = x^2 − 4
will have a parabola graph with:

a) y-intercept at y = _____

b) x-intercepts at x = _____
and at x = _____

24.) Solve for x.

a) x^2 + 7x + 10 = 0.

b) x^2 − 10x + 16 = 0.

c) x^2 + 4x − 12 = 0.

d) $10x^2$ + 13x − 3 = 0.

25.) Equation for this graph. y = _____