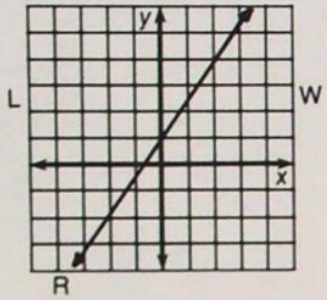
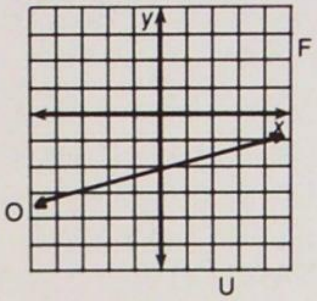
Why Does a Poor Man Drink Coffee?

Use the slope and y-intercept to graph each equation below. The graph, if extended, will cross a letter. Print this letter in each box that contains the number of that exercise.

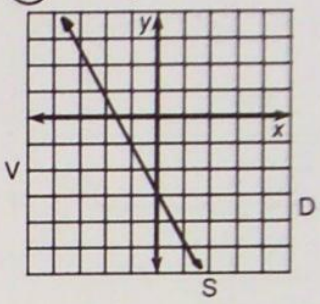
(1) $-3x + 2y = 2$



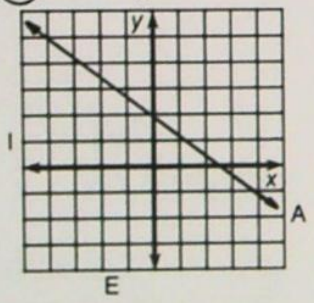
(2) $x - 4y = 8$



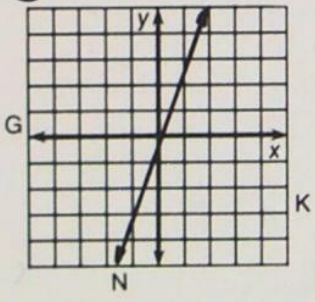
(3) $2x + y = -3$



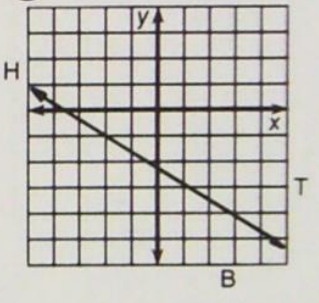
(4) $2x + 3y = 6$



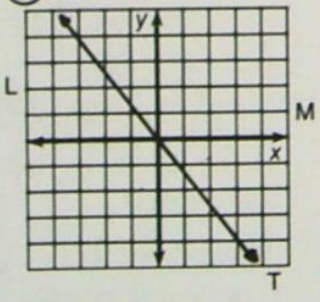
(5) $3x - y = 1$



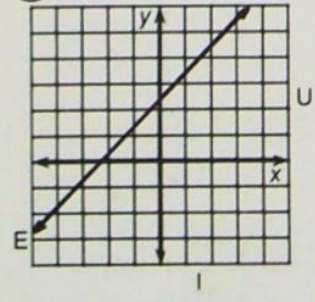
(6) $-3x - 5y = 10$



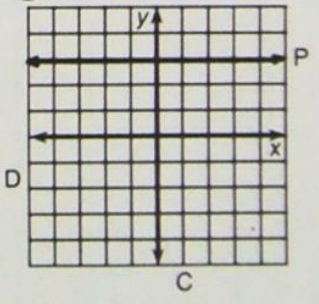
(7) $4x + 3y = 0$



(8) $2x - 2y + 5 = 0$



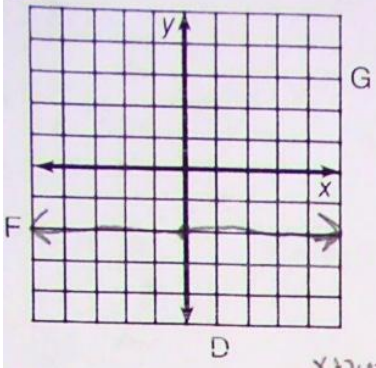
(9) $y - 3 = 0$



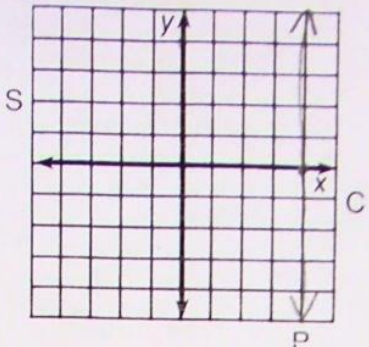
6	8	6	4	3	5	2	9	1	2	9	8	1	7	8	4
H	E	H	A	S	N	O	P	R	O	P	E	R	T	E	A

...ing of letters near the bottom of the page and CROSS IT OUT each time it appears. When you finish, write the remaining letters in the rectangle at the bottom of the page.

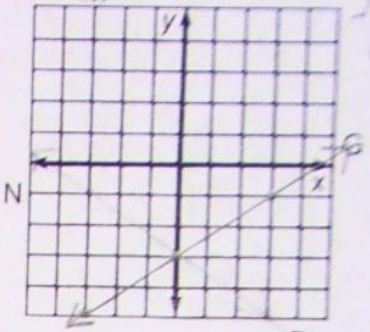
① $y = -2$



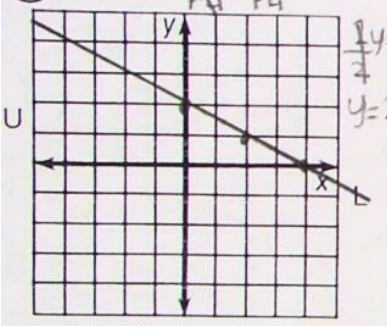
② $x = 4$



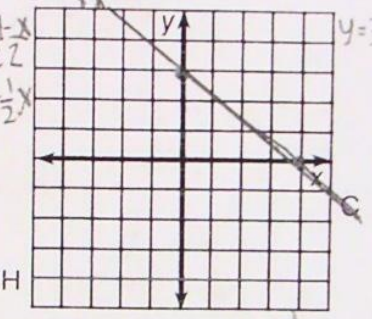
③ $2x - 3y = 9$



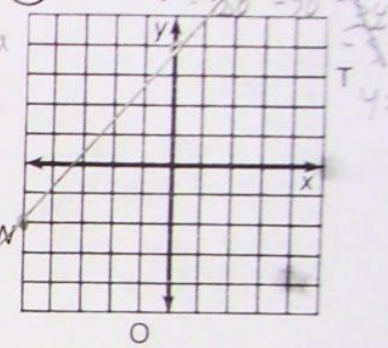
④ $x + 2y - 4 = 0$



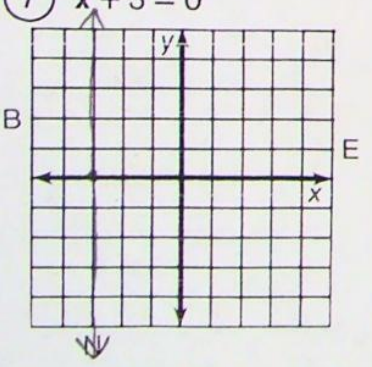
⑤ $3x + 4y = 12$



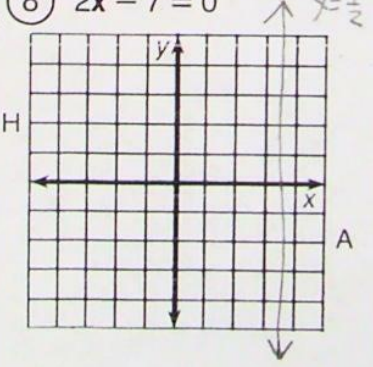
⑥ $6x - 5y + 20 = 0$



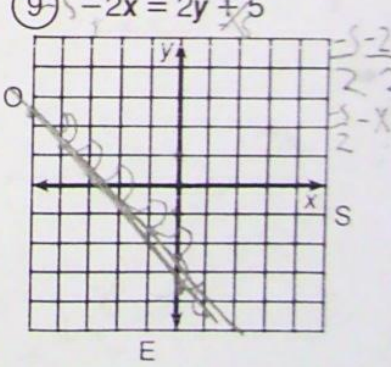
⑦ $x + 3 = 0$



⑧ $2x - 7 = 0$



⑨ $5 - 2x = 2y + 5$



C S I H O W E H O F A N D A R L B O I U L F G M S I P T O W E I E R N

Answer: SHE HAD A BUM STEER

OBJECTIVE 5–m: To graph a line given its equation (includes vertical lines).

Name Key Date _____ Class _____

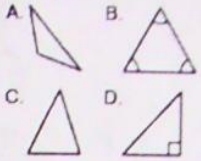
LESSON 4-1

Practice A

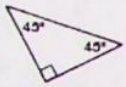
Classifying Triangles

Match the letter of the figure to the correct vocabulary word in Exercises 1–4.

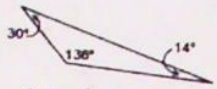
1. right triangle — D
2. obtuse triangle — A
3. acute triangle — B & C
4. equiangular triangle — B



Classify each triangle by its angle measures as acute, equiangular, right, or obtuse. (*Note:* Give two classifications for Exercise 7.)

5. 

Right

6. 

Obtuse

7. 

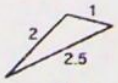
Equiangular & Acute

For Exercises 8–10, fill in the blanks to complete each definition.

8. An isosceles triangle has 2 congruent sides.
9. An equilateral triangle has three congruent sides.
10. A scalene triangle has no congruent sides.

Classify each triangle by its side lengths as equilateral, isosceles, or scalene. (*Note:* Give two classifications in Exercise 13.)

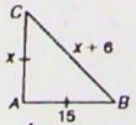
11. 
Isosceles

12. 

scalene

13. 
equilateral ⇒ equiangul (implies)

Find the side lengths of the triangle.

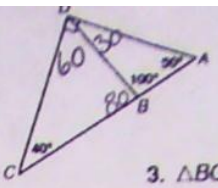


14. AB = 15 AC = 15 BC = 21 (Just for you Jacob ☺)

15. The New York City subway is known for its crowded cars. If all the seats in a car are taken, passengers must stand and steady themselves with railings or handholds. The last subway cars designed with steel hand straps were the "Redbirds" made in the late 1950s and early 1960s. The figure gives the dimensions of one of these triangular hand straps. How many hand straps could have been made from 99 inches of steel?

3

Classify each triangle by its angle measures.
(*Note:* Some triangles may belong to more than one class.)

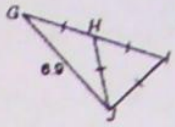


1. $\triangle ABD$ Obtuse

2. $\triangle ADC$ Right

3. $\triangle BCD$ Acute

Classify each triangle by its side lengths.
(*Note:* Some triangles may belong to more than one class.)



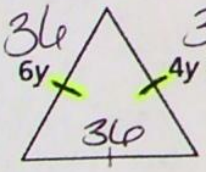
4. $\triangle GIJ$ Scalene

5. $\triangle HIJ$ equilateral

6. $\triangle GHJ$ isosceles

Multi-Step Find the side lengths of each triangle.

7. 36, 36, $6y$, $4y + 12$



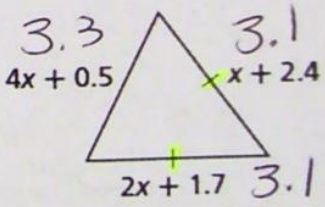
$6y = 4y + 12$

$2y = 12$

$y = 6$

$6(6) = 36$

8. 3.3, 3.1, $4x + 0.5$, $x + 2.4$, $2x + 1.7$, 3.1



$2x + 1.7 = x + 2.4$

$x = .7$

$.7 + 2.4 = 3.1$

$4(.7) + .5 = 3.3$