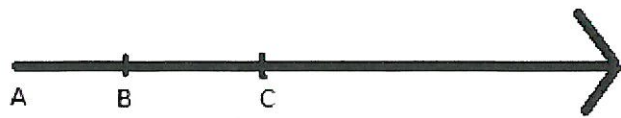


Name: AK Period: \_\_\_\_\_ Date: \_\_\_\_\_

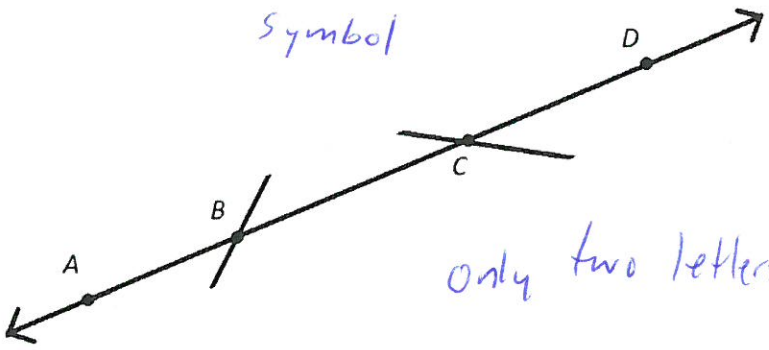
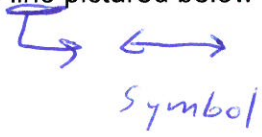
Unit 1 Practice Test

1. Name the ray pictured below as many ways as possible.



$\overrightarrow{AB}$   
 $\overrightarrow{AC}$  only

2. Name the line pictured below as many ways as possible.



$\overleftrightarrow{AB}$   $\overleftrightarrow{BA}$   $\overleftrightarrow{CA}$   $\overleftrightarrow{DA}$   
 $\overleftrightarrow{AC}$   $\overleftrightarrow{BC}$   $\overleftrightarrow{CB}$   $\overleftrightarrow{DB}$   
 $\overleftrightarrow{AD}$   $\overleftrightarrow{BD}$   $\overleftrightarrow{CD}$   $\overleftrightarrow{DC}$

only two letters!

3. Find the length of a line segment with endpoints C(-2, 6) and D(4, -4). Name the line segment two different ways.

Distance Form

or

Pythagorean Thm

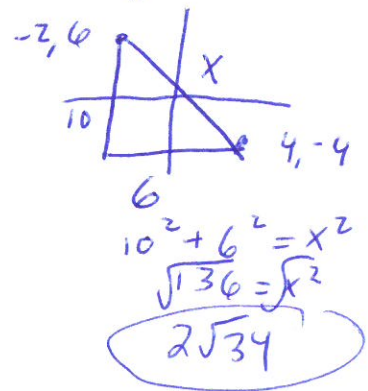
$$\sqrt{(-2-4)^2 + (6-(-4))^2}$$

$$\sqrt{(-6)^2 + (10)^2}$$

$$\sqrt{136}$$

$$2\sqrt{34}$$

$2\sqrt{34}$

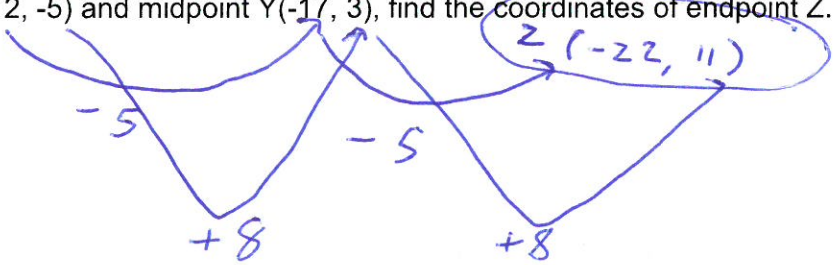


4. Find the midpoint of segment MN given M(13, -7) and N(-2, -16).

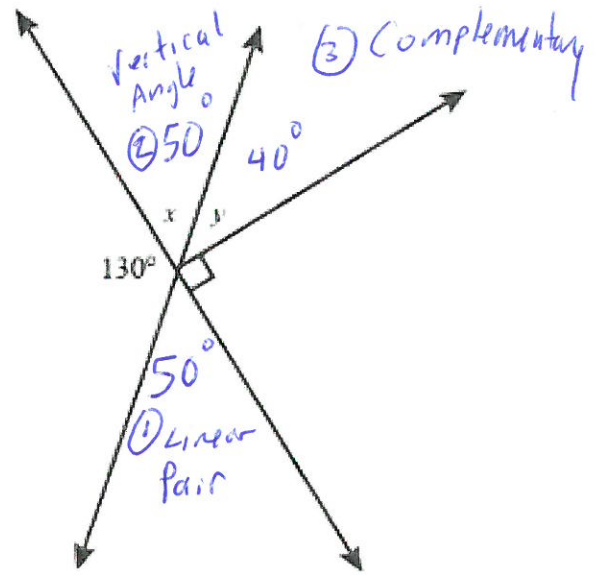
$$\left( \frac{13 + (-2)}{2}, \frac{-7 + (-16)}{2} \right)$$

$\left( \frac{11}{2}, \frac{-23}{2} \right)$  or  $(5.5, -11.5)$

5. Given line segment XZ, endpoint X(-12, -5) and midpoint Y(-17, 3), find the coordinates of endpoint Z.



6. Find the measure of angles x and y in the provided picture.

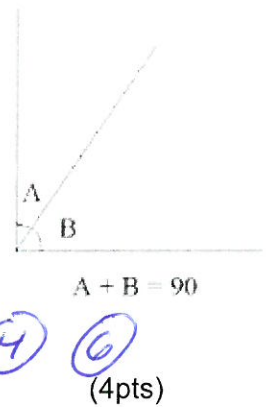
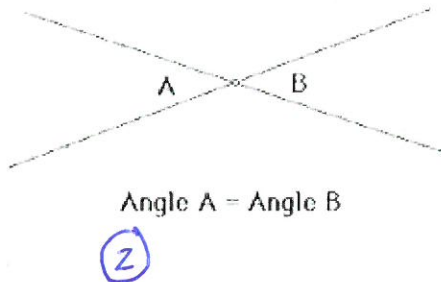
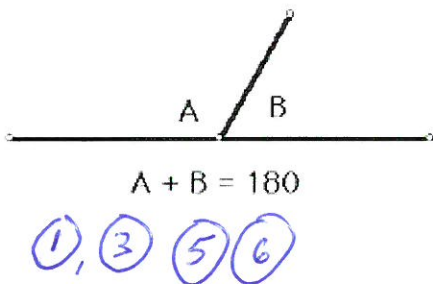


7. Write the name from the word bank that corresponds with each picture. Multiple words can appear in one picture, and words may be used in more than one picture.

- ① Linear Pair
- ④ Complementary Angles

- ② Vertical Angles
- ⑤ Straight Angle

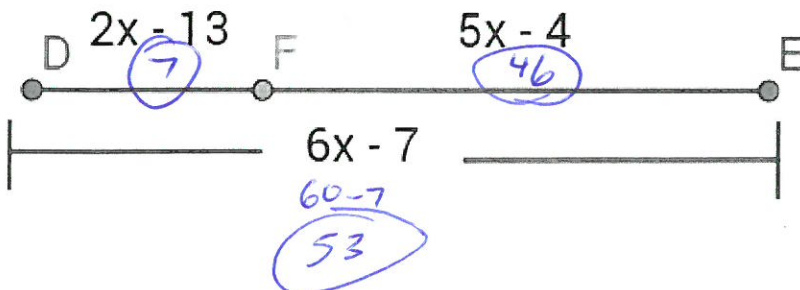
- ③ Supplementary Angles
- ⑥ Adjacent Angles



8. Which lines are horizontal? Circle all that apply.

- A.  $x = 0$
- B.  $y$  - axis
- C.  $x$  - axis
- D.  $y = -2$
- E.  $y = 0$
- F.  $x = 17$

9. Find the measure of segment DF, FE and DE.



$$2x - 13 + 5x - 4 = 6x - 7$$

$$7x - 17 = 6x - 7$$

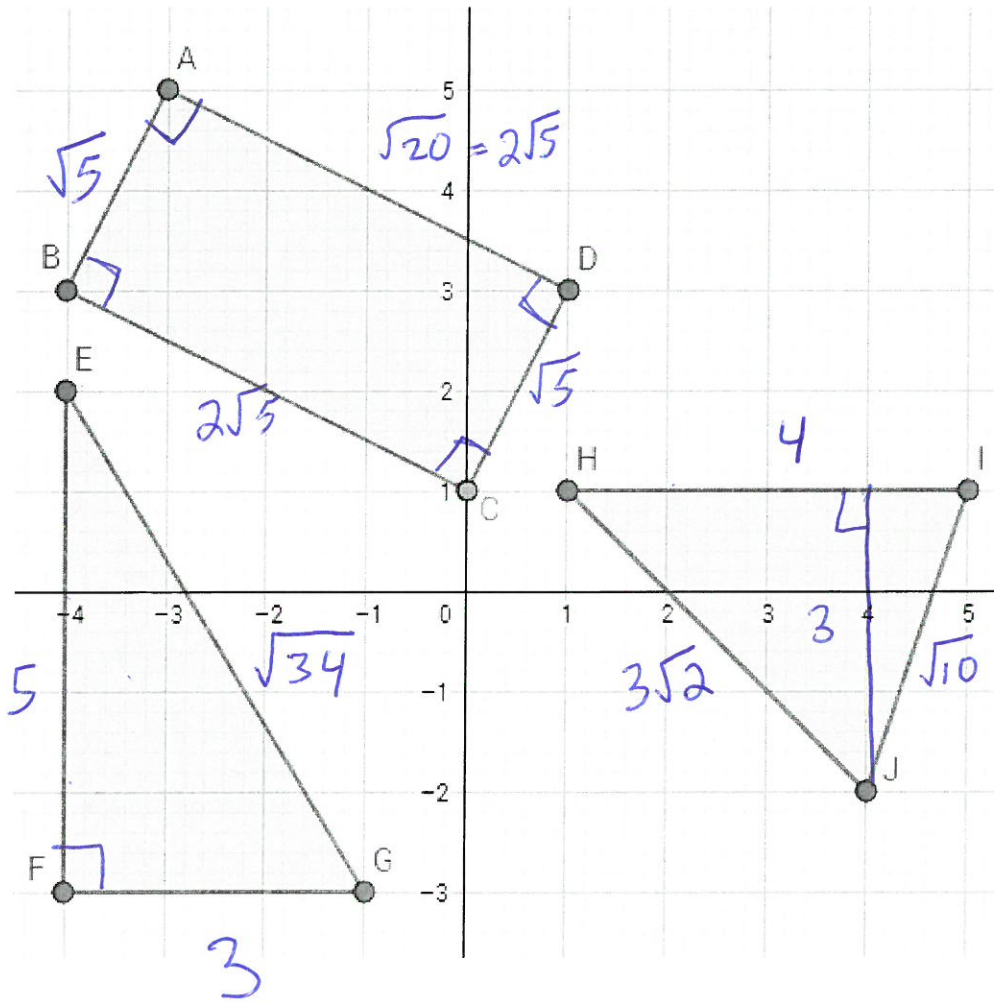
$$-6x \quad -6x$$

$$x - 17 = -7$$

$$+17 \quad +17$$

$$x = 10$$

10. Find the perimeter and area of each polygon.



□ ABCD

$$P = 6\sqrt{5} \text{ units}$$

$$\approx 13.4$$

$$A = \sqrt{5} \cdot 2\sqrt{5} = 2\sqrt{5}$$

$$= 10 \text{ units}^2$$

△ EFG

$$P = 8 + \sqrt{34} \text{ units}$$

$$\approx 13.8 \text{ units}$$

$$A = \frac{15}{2} = 7.5 \text{ units}^2$$

△ HIJ

$$P = 4 + \sqrt{10} + 3\sqrt{2}$$

$$\approx 11.4 \text{ units}$$

$$A = \frac{4 \cdot 3}{2} = 6 \text{ units}^2$$

11. Write the equation of a line through the points Q(-7, -12) and B(3, -32) in point-slope form AND slope intercept form.

$$m = \frac{-12 - (-32)}{-7 - 3}$$

$$= \frac{20}{-10} = -2$$

point slope

$$y + 12 = -2(x + 7)$$

or

$$y + 32 = -2(x - 3)$$

Slope intercept

$$y + 12 = -2(x + 7)$$

$$y + 12 = -2x - 14$$

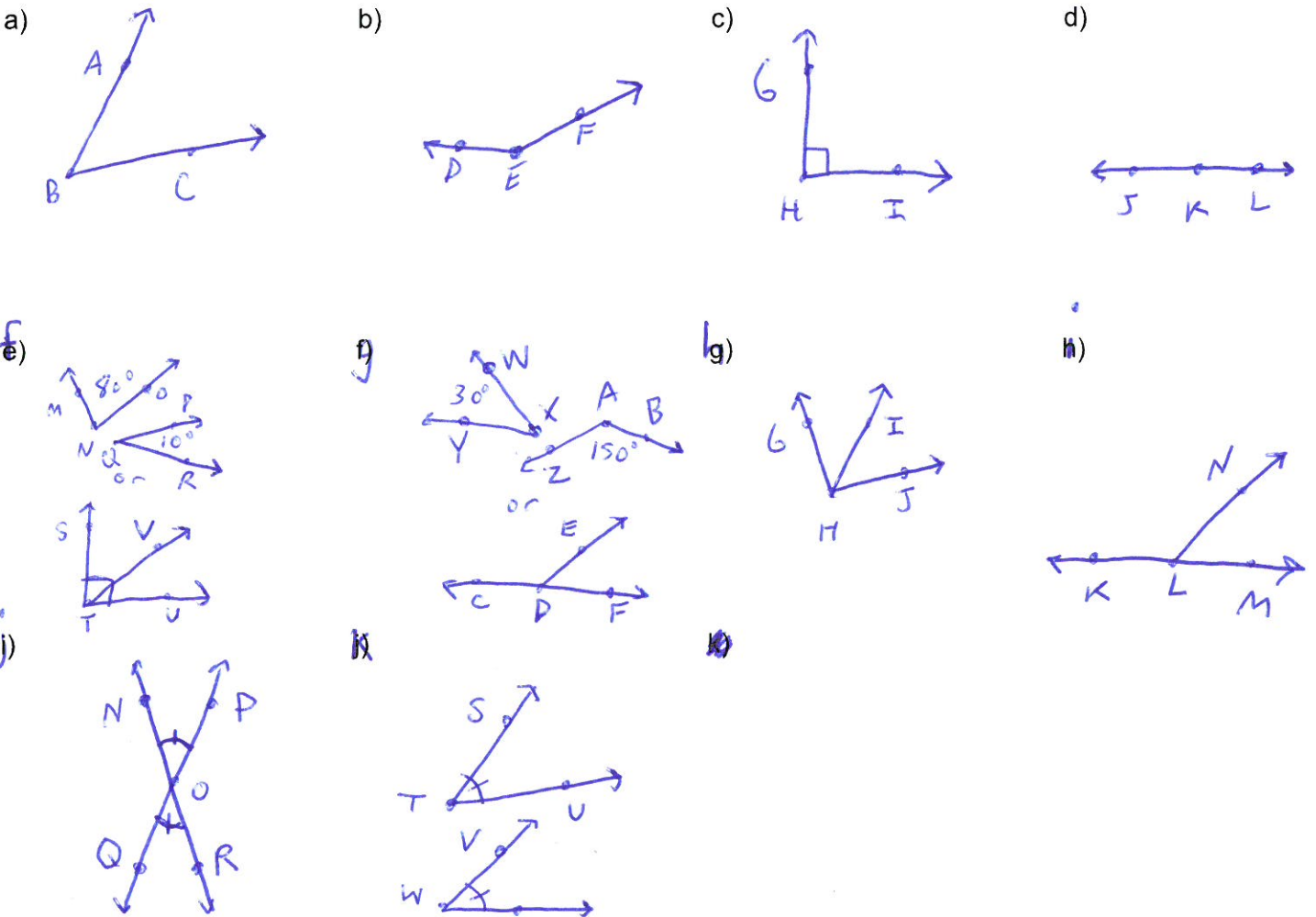
$$-12 \quad -12$$

$$y = -2x - 26$$

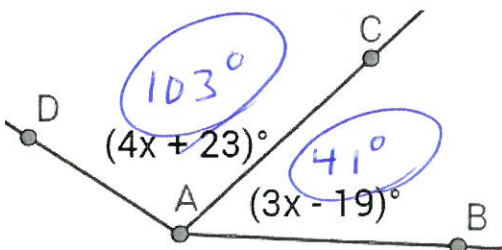
12. Match each word to its .

- |                         |    |   |
|-------------------------|----|---|
| a) Acute angle          | 7  | 1) An angle that is $90^\circ$  |
| b) Obtuse angle         | 5  | 2) Adjacent and supplementary angles.                                   |
| c) Right angle          | 1  | 3) Angles that add up to $90^\circ$                                     |
| d) Straight angle       | 6  | 4) Angles formed by intersecting lines, are opposite each other and =   |
| f) Complementary Angles | 3  | 5) An angle that is greater than $90^\circ$ but less than $180^\circ$ . |
| g) Supplementary Angles | 10 | 6) An angle that is $180^\circ$ .                                       |
| h) Adjacent Angles      | 8  | 7) An angle that is less than $90^\circ$ .                              |
| i) Linear Pair          | 2  | 8) Angles that share a side and a vertex.                               |
| j) Vertical Angles      | 4  | 9) Angles that have the same measure.                                   |
| k) Congruent Angles     | 9  | 10) Angles that add up to $180^\circ$ .                                 |

13. Sketch and properly mark each of the vocab terms in question 12 next to each corresponding letter.



14) Given  $m\angle DAB = 144^\circ$ , find  $x$ ,  $m\angle DAC$  and  $m\angle CAB$ ,



$$\begin{aligned}
 4x + 23 + 3x - 19 &= 144 \\
 7x + 4 &= 144 \\
 7x &= 140 \\
 x &= 20
 \end{aligned}$$