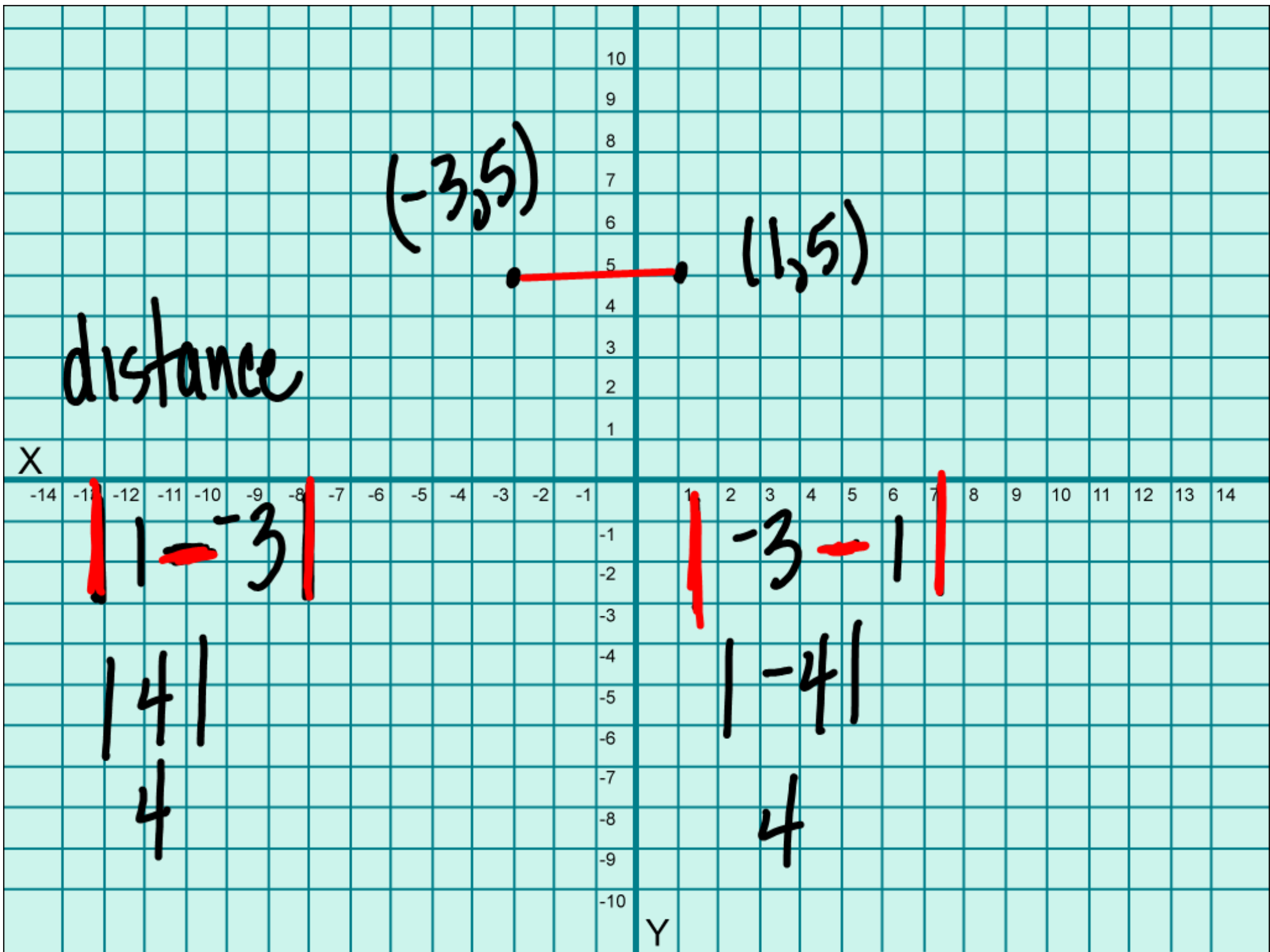
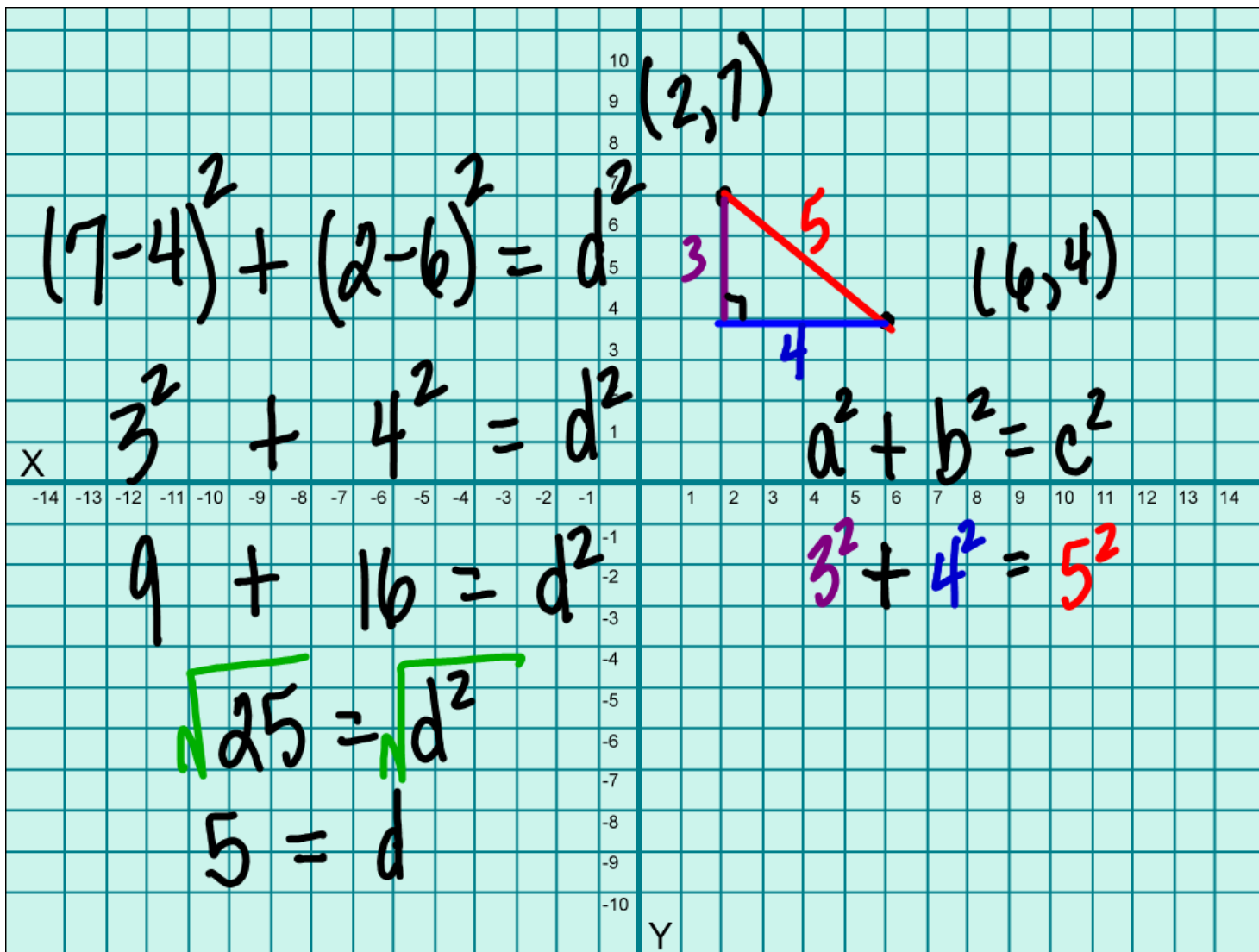
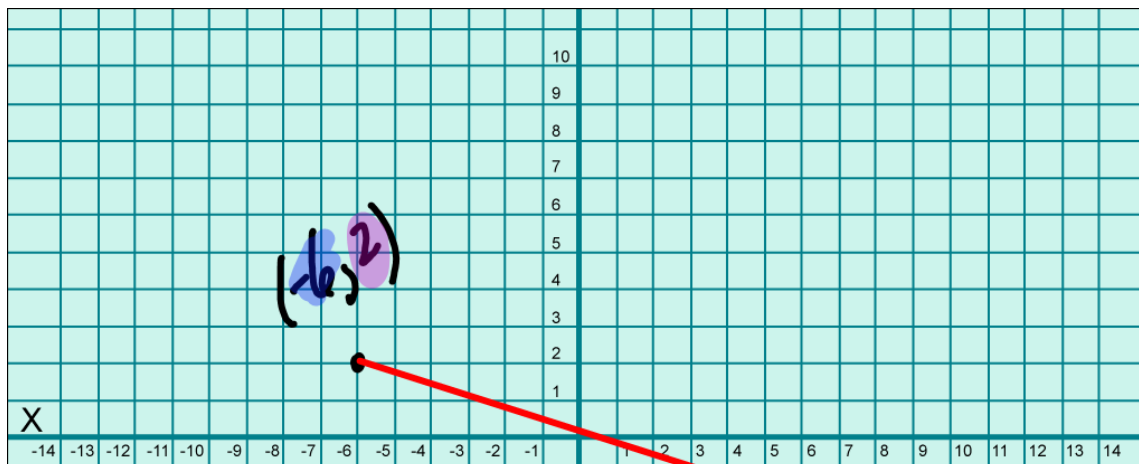


5.6 Distance Formula







$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$

$$d = \sqrt{(-6 - 4)^2 + (2 - (-1))^2}$$

$$d = \sqrt{(-10)^2 + (3)^2}$$

$$d = \sqrt{100 + 9}$$

$$d = \sqrt{109}$$

$$d \approx 10.44 \text{ units}$$

$$AB = AC$$

AB

$$d = \sqrt{(3-2)^2 + (7-1)^2}$$

$$d = \sqrt{1^2 + 6^2}$$

X

$$d = \sqrt{37}$$

AC

$$d = \sqrt{(3-4)^2 + (7-1)^2}$$

$$d = \sqrt{(-1)^2 + 6^2}$$

$$d = \sqrt{1 + 36}$$

$$d = \sqrt{37}$$

10

9

8

7

6

5

4

3

2

1

0

-1

-2

-3

-4

-5

-6

-7

-8

-9

-10

Y

A (3,7)

B (2,1)

C (4,1)

Perimeter

$2 + 2\sqrt{37}$ units

p 343

10-22 E

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$$