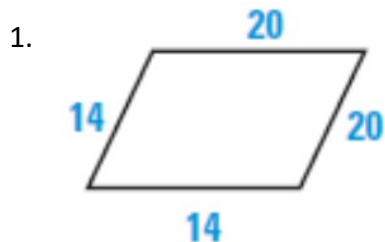**Geometry 1-2**

Name _____ Date _____ Period _____

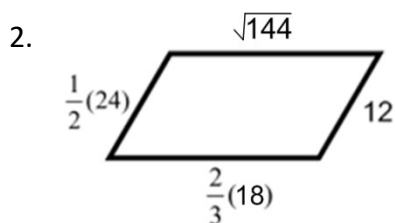### Regular Parallelograms - Review

Level 1:

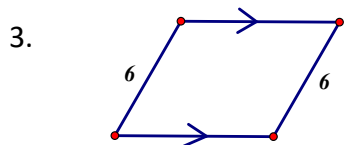Determine whether or not the following figures are parallelograms. Give a reason for your answer.
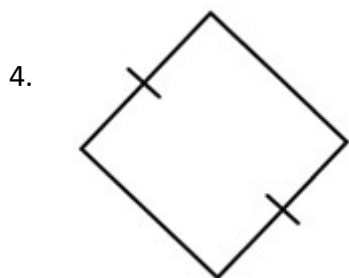
1.

Parallelogram: Yes or No

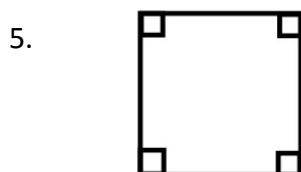Reason_____

2.

Parallelogram: Yes or No

Reason_____

3.

Parallelogram: Yes or No

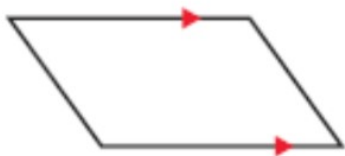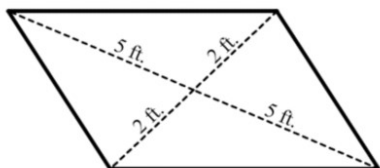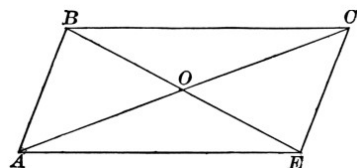Reason_____

4.

Parallelogram: Yes or No

Reason_____

5.

Parallelogram: Yes or No

Reason_____

Geometry 1-2

6.

Parallelogram: Yes or No

Reason_____

7.

5 ft. 2 ft.

2 ft. 5 ft.

Parallelogram: Yes or No

Reason_____

8.

100°

100°

Parallelogram: Yes or No

Reason_____

9.

B   O

O

A   E

Parallelogram: Yes or No
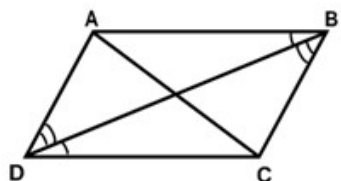
Reason_____

10.

85°

85°   95°

Parallelogram: Yes or No

Reason_____

11.

A   B

D   C

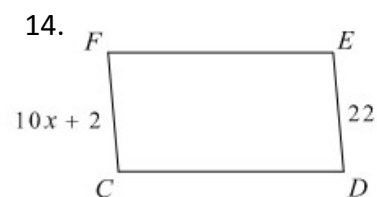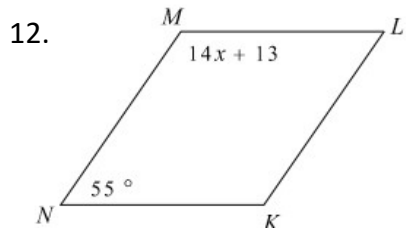Parallelogram: Yes or No

Reason_____

Level 2:

In problems 12 – 14, the figures are parallelograms.

12.

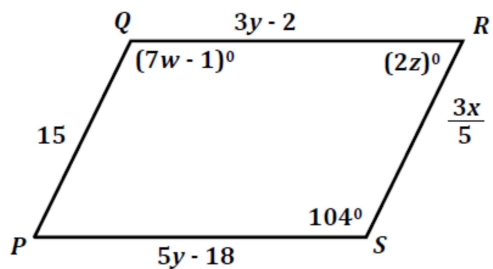M L

$14x + 13$

$55°$

N K

13.

X W

$115°$

$9x + 7$

U V

14.

F E

$10x + 2$ 22

C D
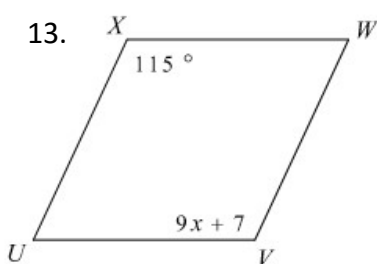
x = _____

x = _____

x = _____

15. *PQRS* is a parallelogram. Find all the variables.

Q $3y - 2$ R

$(7w - 1)°$ $(2z)°$

15 $\dfrac{3x}{5}$

$104°$

P $5y - 18$ S

w = _____

x = _____

y = _____

z = _____

16. Solve for *x* and *y* in parallelogram *LMNO*.

L M

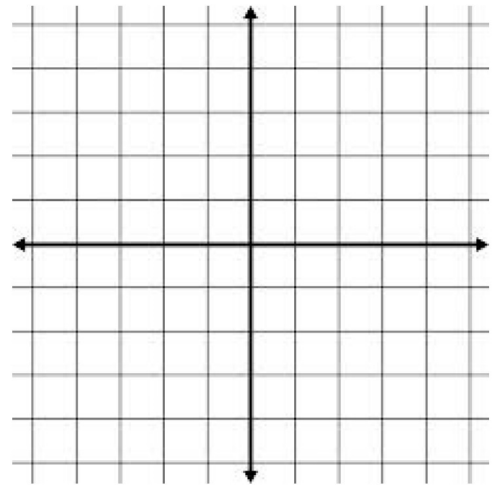$8y$ 5

$2x + 1$ $4y + 2$

O N
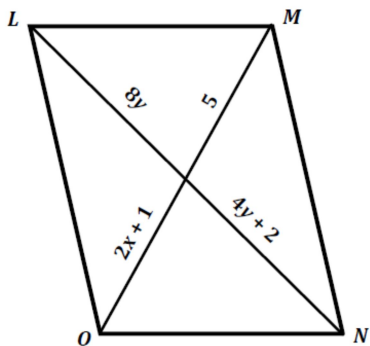
x = _____

y = _____

Level 3/4:

17. Graph quadrilateral ABCD with the given vertices: A(-2, 4), B(3, 1), C(0, -4), D(-5, -1).

a) Is the quadrilateral a parallelogram? Show why or why not and explain your work in complete sentences.

b) Is the quadrilateral a rhombus? Show why or why not and explain your work in complete sentences.

c) Is the quadrilateral a rectangle? Show why or why not and explain your work in complete sentences.

d) Is the quadrilateral a square? Show why or why not and explain your work in complete sentences.