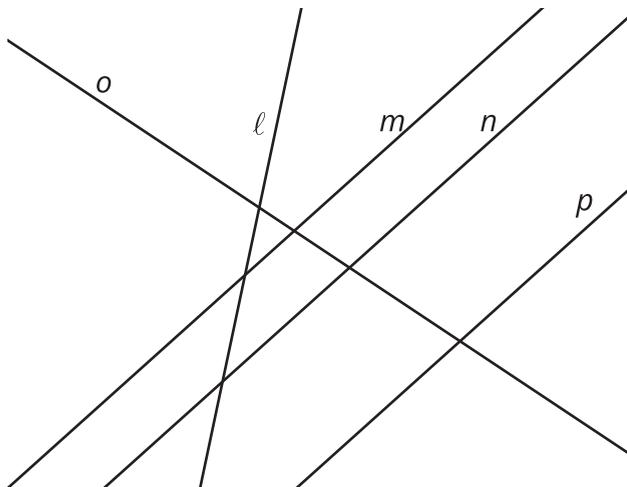


Lesson 4 Practice Problems

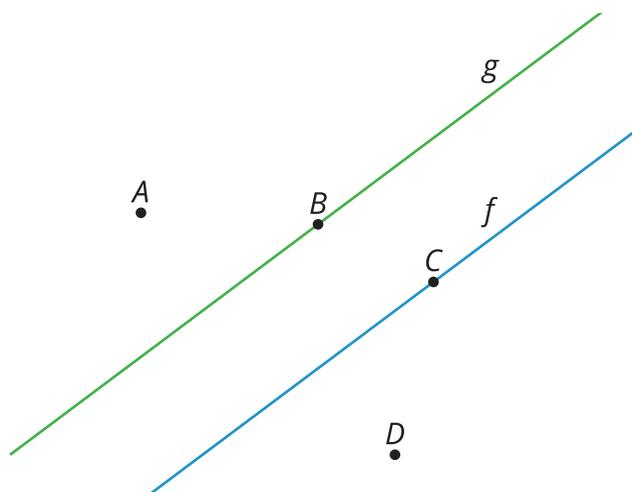
1. Angle ABC is taken by a dilation with center P and scale factor 3 to angle $A'B'C'$. The measure of angle ABC is 21° . What is the measure of angle $A'B'C'$?

2. Select **all** lines that could be the image of line m by a dilation.



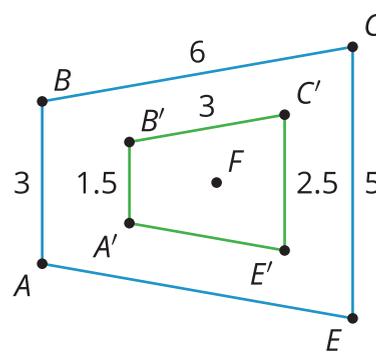
- A. ℓ
- B. m
- C. n
- D. o
- E. p

3. Dilate line f with a scale factor of 2. The image is line g . Which labeled point could be the center of this dilation?



- A. A
- B. B
- C. C
- D. D

4. Quadrilateral $A'B'C'E'$ is the image of quadrilateral $ABCE$ after a dilation centered at F . What is the scale factor of this dilation?



(From Unit 3, Lesson 3.)

5. A polygon has a perimeter of 18 units. It is dilated with a scale factor of $\frac{3}{2}$. What is the perimeter of its image?

- A. 12 units
- B. 24 units
- C. 27 units
- D. 30 units

(From Unit 3, Lesson 3.)

6. Solve the equation.

$$\frac{4}{7} = \frac{10}{x}$$

(From Unit 3, Lesson 1.)

7. Here are some measurements for triangle ABC and triangle XYZ :

- Angle CAB and angle ZXY are both 30 degrees
- AC and XZ both measure 3 units
- CB and ZY both measure 2 units

Andre thinks these triangles must be congruent. Clare says she knows they might not be congruent. Construct 2 triangles with the given measurements that aren't congruent. Explain why triangles with 3 congruent parts aren't necessarily congruent.

(From Unit 2, Lesson 11.)