

## Lesson 73 • Formulas for Sequences

### *Power Up*

- *Facts*
- *Mental Math*
- *Problem Solving*

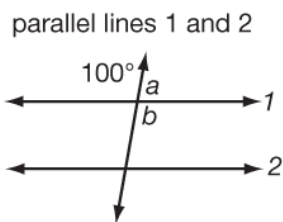
### *New Concepts*

- *Examples*
- *Practice Set*

### *Written Practice*

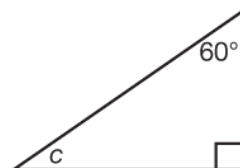
**Facts**

Find the measure of the angle indicated by the letters.

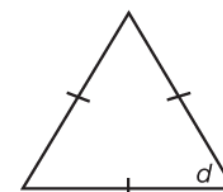


$$m\angle a = 80^\circ$$

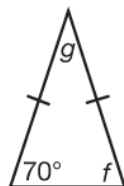
$$m\angle b = 100^\circ$$



$$m\angle c = 30^\circ$$

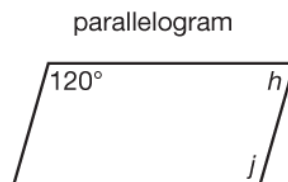


$$m\angle d = 60^\circ$$



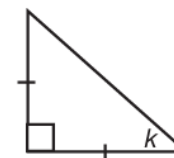
$$m\angle f = 70^\circ$$

$$m\angle g = 40^\circ$$



$$m\angle h = 60^\circ$$

$$m\angle j = 120^\circ$$



$$m\angle k = 45^\circ$$

## Written Practice

1. 44%

2. 125

3. \$14.40

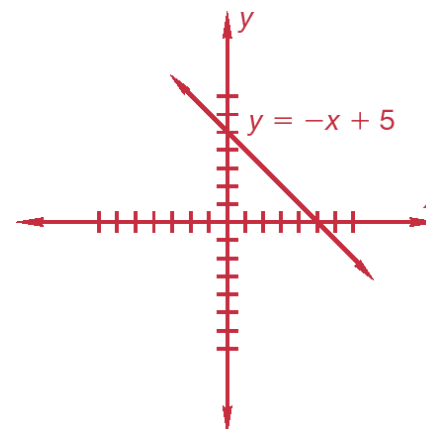
4. Yes,  $\frac{D}{W} = 5$

5. 8 in.

6.  $\frac{6 \cancel{\text{yd}}}{3 \text{ sec}} \cdot \frac{3 \text{ ft}}{1 \cancel{\text{yd}}} = 6 \text{ ft/sec}$

7.  $\frac{440 \cancel{\text{ft}}}{1 \cancel{\text{min}}} \cdot \frac{60 \cancel{\text{min}}}{1 \text{ hr}} \cdot \frac{1 \text{ mi}}{5280 \cancel{\text{ft}}} = 5 \text{ mi/hr}$

8.



9. 60 m<sup>2</sup>

10. a. 0.08 $\overline{3}$

b. 8 $\frac{1}{3}$  %

c. B

11. a.  $4(x^2 + 3x - 1)$

b.  $-2(x + 8)$

## Written Practice

*continued*

12. 26 in.; 32 in.<sup>2</sup>

13. 36 in.; 30 cm<sup>2</sup>

14. D

15. B

16.  $\frac{4m^7}{3b^4}$

17. -8

18.  $x = 1$

19.  $x = \frac{1}{2}$

20.  $x = \frac{9}{2}$

21.  $x = 16$

22.  $x = 20$

23.  $x = 8$

24. 37

25. Sample: The graph is showing that it costs money to get into an amusement park and then costs additional money for each ride. It is not a proportion. We could make the situation proportional by eliminating the park's entrance fee and charging the same price for every ride.