

RATIOS AND PROPORTIONS Bell Work

- The ratio is a comparison between two numbers using:
 - Addition
 - Multiplication
 - Division
 - Subtraction

- Which of these is a correct way of representing a ratio?
 - $\frac{1}{2}$
 - 1 : 2**
 - 1 to 2**
 - All of these

- In the proportion $\frac{a}{b} = \frac{c}{d}$, the extremes are:
 - a and d**
 - c and b**
 - a and c**
 - b and d**

- In the proportion $\frac{a}{b} = \frac{c}{d}$, the means are:
 - a and d**
 - c and b**
 - a and c**
 - b and d**

- The solution of $\frac{8}{x} = 2$ is:
 - 16**
 - 4**
 - 0**
 - 28**

- The proportion is a/an:
 - Equality statement
 - Inequality statement
 - Both A. And B.
 - None of these.

Name: _____ Period: _____ Date: _____

RATIOS AND PROPORTIONS Bell Work

7. The ratio of the side lengths of a triangle is **3:5:7**, and its perimeter is **60 ft**. What is the length of the shortest side of the triangle?

8. The ratio of the length to width of an rectangle is **7:3** and its perimeter is **80 cm**. What is the length of the rectangle?

9. The ratio of the side lengths of a quadrilateral is **2:4:5:7**, and its perimeter is **54 m**. What is the length of the shortest side?

10. The ratio of the angle measure in a kite is **2:3:7:3**. What is the measure of each angle?

RATIOS AND PROPORTIONS Bell Work**ANSWER**

1. The ratio is a comparison between two numbers using:

E. Addition

F. Multiplication

G. Division

H. Subtraction

2. Which of these is a correct way of representing a ratio?

E. $\frac{1}{2}$

F. **1 : 2**

G. **1 to 2**

H. All of these

3. In the proportion $\frac{a}{b} = \frac{c}{d}$, the extremes are:

E. ***a* and *d***

F. *c* and *b*

G. *a* and *c*

H. *b* and *d*

4. In the proportion $\frac{a}{b} = \frac{c}{d}$, the means are:

E. *a* and *d*

F. ***c* and *b***

G. *a* and *c*

H. *b* and *d*

5. The solution of $\frac{8}{x} = 2$ is:

E. **16**

F. 4

G. 0

H. 28

6. The proportion is a/an:

E. Equality statement

F. Inequality statement

G. Both A. And B.

H. None of these.

RATIOS AND PROPORTIONS Bell Work

7. The ratio of the side lengths of a triangle is **3:5:7**, and its perimeter is **60 ft**. What is the length of the **shortest** side of the triangle?

$$3:5:7 \rightarrow 3x:5x:7x$$

$$P = 60 \text{ ft}$$

$$P = 3x + 5x + 7x = 15x$$

$$60 \text{ ft} = 15x$$

$$\frac{60 \text{ ft}}{15} = \frac{15x}{15}$$

$$4 \text{ ft} = x$$

$$\text{shortest side} = 3x = 3(4 \text{ ft}) = 12 \text{ ft}$$

8. The ratio of the length to width of an rectangle is **7:3** and its perimeter is **80 cm**. What is the length of the rectangle?

$$L:W = 7:3 \rightarrow 7x:3x$$

$$P = 80 \text{ cm}$$

$$P = 2L + 2W = 2(7x) + 2(3x) = 14x + 6x = 20x$$

$$80 \text{ m} = 20x$$

$$\frac{80 \text{ m}}{20} = \frac{20x}{20}$$

$$4 \text{ m} = x$$

$$L = 7x = 7(4 \text{ m}) = 28 \text{ m}$$

9. The ratio of the side lengths of a quadrilateral is **2:4:5:7**, and its perimeter is **54 m**. What is the length of the **shortest** side?

$$2:4:5:7 \rightarrow 2x:4x:5x:7x$$

$$P = 54 \text{ m}$$

$$P = 2x + 4x + 5x + 7x = 18x$$

$$54 \text{ m} = 18x$$

$$\frac{54 \text{ m}}{18} = \frac{18x}{18}$$

$$3 \text{ m} = x$$

$$\text{shortest side} = 2x = 2(3 \text{ m}) = 6 \text{ m}$$

RATIOS AND PROPORTIONS Bell Work10. The ratio of the angle measure in a kite is **2: 3: 7: 3**. What is the measure of each angle?

$$2: 3: 5: 3 \rightarrow 2x: 3x: 7x: 3x$$

$$\Sigma \text{ interior } \angle \text{ of quadrilateral} = 360^\circ$$

$$\Sigma \text{ interior } \angle \text{ of quadrilateral} = 2x + 3x + 7x + 3x = 15x$$

$$360^\circ = 15x$$

$$\frac{360^\circ}{15} = \frac{15x}{15}$$

$$24^\circ = x$$

$$2x = 2(24^\circ) = 2x = 48^\circ \quad 3x = 3(24^\circ) = 3x = 72^\circ \quad 7x = 7(24^\circ) = 3x = 168^\circ$$

$$2: 3: 5: 3 \rightarrow 48^\circ: 72^\circ: 168^\circ: 72^\circ$$