

Kumon Math Challenge – Sample Questions
Grade 6

1. $\frac{6}{9} \div \frac{54}{72}$

- A. $\frac{3}{26}$
- B. $\frac{8}{9}$
- C. $\frac{3}{7}$
- D. $\frac{4}{9}$

2. If I divide t by 15, I get 5. What does t equal?

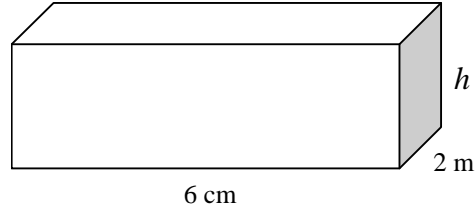
- A. $t = 65$
- B. $t = 95$
- C. $t = 75$
- D. $t = 105$

3. $15 - [12 - (5 - 3)] + 18\left(4\frac{2}{3}\right) =$

- A. 98
- B. 68
- C. 89
- D. 108

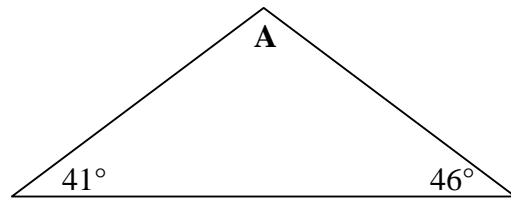
4. $\frac{5}{6} + \frac{1}{9} = \left(\frac{2}{3} - \frac{1}{2}\right)x$

- A. $x = 4\frac{1}{2}$
- B. $x = 5\frac{7}{8}$
- C. $x = 5\frac{2}{3}$
- D. $x = 3\frac{4}{5}$



5. If the volume of the above figure is 48cm^3 then $h =$

- A. 2 cm
- B. 1 cm
- C. 4 cm
- D. 3 cm



6. What is the measure of angle A?

- A. 93 degrees
- B. 90 degrees
- C. 83 degrees
- D. 103 degrees

7. Suppose you double the length of each side of a square. What happens to its area?

- A. The area will increase to four times the original area.
- B. The area will not change.
- C. The area will be double the original area.
- D. The area will increase three times the original area.

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8. A gumball machine is at the local video store. Right now there are 5 red, 2 black, 7 white, 3 orange, 11 purple, 8 green and 7 yellow gumballs in the machine. If you get a black gumball, you get your video free that day. What is the probability of getting a free video rental?

- A. $\frac{1}{43}$
- B. $\frac{5}{43}$
- C. $\frac{3}{43}$
- D. $\frac{2}{43}$

9. If $x^2 = y^2$ then $x = y$.
The above statement is:
- A. Always true
 - B. Sometimes true
 - C. Never true

10. Solve the inequalities:

$$5x + 8 \geq 6x$$

$$1 - 5x < 10 - 44$$

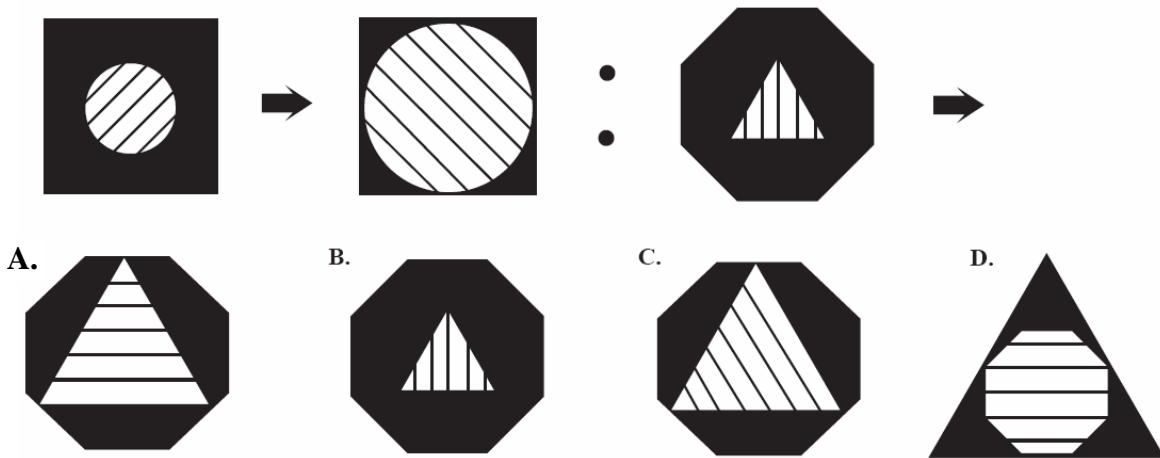
- A. $8 \leq x < 9$
- B. $7 < x \leq 8$
- C. $3 < x \leq 8$
- D. No Solution

Find the next number in the sequence.

11. 3 6 12 24 ...

- A. 36
- B. 48
- C. 25
- D. 44

12. The first two shapes have a pattern. Use that pattern to find the next shape.



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ANSWER KEY

1. B
2. C
3. C
4. C
5. C
6. A
7. A
8. D
9. B
10. B
11. B
12. A