



COASTMETRO
ELEMENTARY MATH PROJECT

GRADE 7 PRACTICE QUESTIONS
MIXED REVIEW

1. Solve

$$4x - 9 = 19$$

2. Solve

$$-6 + 3.5 - 2$$

3. Find 35% of 240.

4. A price increases from \$80 to \$92
What is the percent increase?

5. The ratio of boys to girls is 3 : 5.
If there are 40 students total, how many are boys?

6. A car travels 360 km in 4 hours.
What is the unit rate in km per hour?

7. A rectangular prism has dimensions 6 cm, 4 cm, and 5 cm.
What is its volume?

8. The diameter of a circle is 14 cm.
What is the radius?

9. A bag contains 8 red and 12 blue marbles.
What is the probability of selecting a blue marble as a decimal?

10. A \$150 jacket is discounted by 20%.
What is the sale price?

11. Explain why increasing a number by 25% and then decreasing it by 25% does not return the original number.

12. A spinner has 8 equal sections. 3 are blue.
What is the experimental probability of landing on blue as a fraction and a percent?

13. A \$150 jacket increases in price by 12%.
What is the new price?

14. Explain why multiplying both terms of a ratio by the same number creates an equivalent ratio.

15. A student solves $3x + 6 = 21$ by subtracting 6 and dividing by 3. Explain why this method works.

16. A circle graph shows 30% of students prefer soccer. If 200 students were surveyed, explain how you would determine how many prefer soccer.

17. Describe two different ways to determine the unit rate of 90 km in 1.5 hours.

18. Explain why subtracting a negative number results in a larger value.

19. Without calculating fully, determine which is greater:
40% of 150 or 60% of 90.
Explain your reasoning.

20. A \$200 fundraiser collects 15% more than expected. The total money is then divided in a 2 : 3 ratio between two clubs. Explain how you would determine how much each club receives.

21. A school fundraiser raised \$1200.

- 35% of the money is used to buy sports equipment.
- The remaining money is divided in the ratio 2 : 3 between two clubs.

How much money does each club receive?

Explain your reasoning and show all steps clearly.