

Incoming 6th Grade Summer Math Packet

Name: _____

Directions: Complete all problems. Show all work. This packet reviews important skills to help you prepare for next year.

Part 1: Whole Number Operations

1. Solve.

a) $4,582 + 2,967 =$ _____

b) $8,103 - 4,789 =$ _____

c) $246 \times 35 =$ _____

d) $1,248 \div 24 =$ _____

e) $5,674 + 8,925 =$ _____

2. Multi-Step Problems

a) A school collected 2,485 cans in October and 3,176 cans in November. How many cans were collected altogether?

b) A concert hall has 9,000 seats. If 6,845 seats were filled, how many seats were empty?

Part 2: Decimals

3. Add and Subtract

a) $14.28 + 6.3 =$ _____

b) $20.5 - 8.74 =$ _____

c) $9.82 + 17.409 =$ _____

d) $15 - 6.87 =$ _____

4. Multiply Decimals

a) $4.5 \times 6 =$ _____

b) $2.8 \times 7 =$ _____

c) $3.4 \times 1.5 =$ _____

d) $7.2 \times 2.3 =$ _____

5. Divide Decimals

a) $6.4 \div 8 =$ _____

b) $2.8 \div 7 =$ _____

c) $3.4 \div 5 =$ _____

d) $73 \div 2 =$ _____

6. Word Problem

A rope is 12.5 feet long. Another rope is 8.75 feet long. What is the total length of the two ropes?

Part 3: Fractions

7. Simplify.

a) $\frac{8}{12} =$ _____

b) $\frac{15}{25} =$ _____

c) $\frac{18}{30} =$ _____

8. Add and Subtract Fractions

a) $\frac{1}{4} + \frac{1}{2} = \underline{\hspace{2cm}}$

b) $\frac{5}{8} - \frac{1}{8} = \underline{\hspace{2cm}}$

c) $\frac{2}{3} + \frac{1}{6} = \underline{\hspace{2cm}}$

d) $\frac{7}{10} - \frac{1}{2} = \underline{\hspace{2cm}}$

9. Multiply Fractions

a) $\frac{1}{2} \times 6 = \underline{\hspace{2cm}}$

b) $8 \times \frac{3}{4} = \underline{\hspace{2cm}}$

c) $\frac{2}{5} \times \frac{10}{20} = \underline{\hspace{2cm}}$

d) $1\frac{1}{5} \cdot 5 = \underline{\hspace{2cm}}$

e) $4\frac{1}{2} \cdot \frac{7}{8} = \underline{\hspace{2cm}}$

10. Dividing Fractions

a) $\frac{1}{2} \div 6 = \underline{\hspace{2cm}}$

b) $8 \div \frac{3}{4} = \underline{\hspace{2cm}}$

c) $\frac{2}{5} \div \frac{10}{20} = \underline{\hspace{2cm}}$

d) $1\frac{1}{5} \div 5 = \underline{\hspace{2cm}}$

11. Word Problem

Emily ate $\frac{3}{8}$ of a pizza for lunch and $\frac{1}{4}$ of the pizza for dinner. How much pizza did she eat altogether?

Part 4: Coordinate Plane

12. Plot and Label

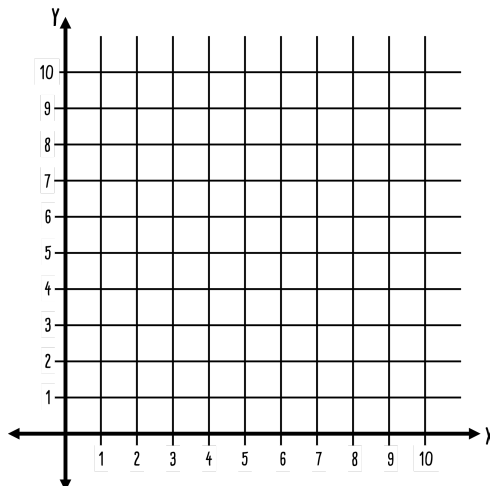
Graph these points:

A (2,4)

B (5,1)

C (7,6)

D (1,7)



Part 5: Numerical Expressions

13. Evaluate.

a) $8 + 4 \times 3$

b) $(12 - 4) \times 5$

c) $24 \div 6 + 7$

d) $18 - (3 \times 4)$

e) $(8 + 2) \times (10 - 7)$

Part 6: Challenge Problems

14.

A bike costs \$240. It is on sale for \$35 off. How much does the bike cost now?

15.

A runner jogs 2.5 miles each day for 8 days. How many miles does the runner jog altogether?

16.

A recipe calls for $\frac{3}{4}$ a cup of milk. You make the recipe twice. How much milk do you need?

Part 7: Ratios and Rates

17. Write each ratio in simplest form.

a) 8 red marbles to 12 blue marbles

b) 15 boys to 20 girls

c) 18 cats to 24 dogs

18. Find the unit rate.

a) 24 miles in 3 hours

b) \$18 for 6 notebooks

19. Better Buy

a) Package A contains 8 granola bars for \$4.00. Package B contains 12 granola bars for \$5.40. Which is the better buy? Explain.

Part 8: Percents

29. Convert each percent to a decimal.

a) 25%

b) 40%

c) 5%

30. Convert each decimal to a percent.

a) 0.50

b) 0.08

c) 0.32

d) 0.91

31. Find the percent.

a) 10% of 80

b) 50% of 120

c) 20% of 45

32. Shopping Discounts

a) A video game costs \$40 and is 25% off. How much is the discount? What is the sale price?
