

**SHOW ALL WORK to receive full credit.**

**Multiply or divide and show your work. (2 points each)**

1. 
$$\begin{array}{r} 613 \\ \times 97 \\ \hline \end{array}$$

2. 
$$3 \overline{)5126}$$

$\frac{52}{\times 1}$	$\frac{52}{\times 2}$	$\frac{52}{\times 3}$	$\frac{52}{\times 4}$	$\frac{52}{\times 5}$	$\frac{52}{\times 6}$	$\frac{52}{\times 7}$	$\frac{52}{\times 8}$	$\frac{52}{\times 9}$
52	104	156	208	260	312	364	416	468

3. 
$$52 \overline{)38159}$$

**Complete the following domain/range tables. (6 points each)**

4.

x	y = 7x + 2	y
8		
1		
2		
0		
4		
3		

5.

x	y = 10x - 9	y
9		
4		
7		
5		
10		
2		

**Complete the following without the use of a table, but still think of the mental percents to help you.  
(2 points each)**

6. What is 10% of \$65.00? \_\_\_\_\_

7. What is 75% of 80? \_\_\_\_\_

8. What is 16% of \$340.00? \_\_\_\_\_

9. What is 9% of 64? \_\_\_\_\_

**Solve the following equations. (3 points each)**

10.  $5x + 6 = 41$

11.  $2x + 54 = 8x + 6$

12.  $\frac{9}{27} = \frac{x}{12}$

13.  $\frac{x+3}{48} = \frac{5}{6}$

14.  $\frac{14}{x+7} = \frac{20}{x+16}$

15.  $\frac{x+1}{9} = \frac{x+3}{15}$

16.  $3(6x + 1) = 2(3x + 7) + 1$

17.  $4(3x + 12) + 9 = 7(2x + 7) + 2x$

**SHOW ALL WORK to receive full credit.**

**Multiply or divide. (2 points each)**

1. 
$$\begin{array}{r} 429 \\ \times 36 \\ \hline \end{array}$$

2. 
$$4 \overline{)8071}$$

36	36	36	36	36	36	36	36	36
$\times 1$	$\times 2$	$\times 3$	$\times 4$	$\times 5$	$\times 6$	$\times 7$	$\times 8$	$\times 9$
36	72	108	144	180	216	252	288	324

3. 
$$36 \overline{)84426}$$

**Complete the following domain/range tables. (6 points each)**

4.

x	y = 3x + 6	y
1		
5		
2		
0		
9		
7		

5.

x	y = 8x - 4	y
9		
4		
7		
6		
11		
2		

Complete the following without the use of a table, but still think of the mental percents to help you.  
(2 points each)

6. What is 50% of \$95.00? \_\_\_\_\_

7. What is 85% of 60? \_\_\_\_\_

8. What is 36% of \$460.00? \_\_\_\_\_

9. What is 4% of 72? \_\_\_\_\_

Solve the following equations. (3 points each)

10.  $4x - 3 = 37$

11.  $6x + 12 = 10x - 4$

12.  $\frac{8}{16} = \frac{x}{34}$

13.  $\frac{x+4}{54} = \frac{2}{12}$

14.  $\frac{4}{x+4} = \frac{3}{x+1}$

15.  $\frac{x+4}{4} = \frac{x+9}{6}$

16.  $4(2x + 6) = 3(3x + 7)$

17.  $3(2x + 8) + 3x = 4(x + 10) + 4$

**SHOW ALL WORK to receive full credit.**

**Multiply or divide. (2 points each)**

1. 
$$\begin{array}{r} 538 \\ \times 29 \\ \hline \end{array}$$

2. 
$$7 \overline{) 2737}$$

$\frac{29}{\times 1}$	$\frac{29}{\times 2}$	$\frac{29}{\times 3}$	$\frac{29}{\times 4}$	$\frac{29}{\times 5}$	$\frac{29}{\times 6}$	$\frac{29}{\times 7}$	$\frac{29}{\times 8}$	$\frac{29}{\times 9}$
29	58	87	116	145	174	203	232	261

3. 
$$29 \overline{) 35786}$$

**Simplify the following expressions using positive and negative integers.. (1 point each )**

- |  |   |   |   |
|--|---|---|---|
| 4. $-8 + 2 = \underline{\hspace{2cm}}$ | 5. $-9 + 1 = \underline{\hspace{2cm}}$  | 6. $4 - 8 = \underline{\hspace{2cm}}$   | 7. $5 - 7 = \underline{\hspace{2cm}}$   |
| 8. $-8 + 8 = \underline{\hspace{2cm}}$ | 9. $-3 - 1 = \underline{\hspace{2cm}}$  | 10. $-3 + 5 = \underline{\hspace{2cm}}$ | 11. $-9 - 9 = \underline{\hspace{2cm}}$ |
| 12. $5 - 9 = \underline{\hspace{2cm}}$ | 13. $-7 - 8 = \underline{\hspace{2cm}}$ | 14. $-8 + 1 = \underline{\hspace{2cm}}$ | 15. $2 + 7 = \underline{\hspace{2cm}}$  |

Complete the following without the use of a table, but still think of the mental percents to help you.  
(2 points each)

16. What is 56% of \$107.00? \_\_\_\_\_

17. What is 29% of 70? \_\_\_\_\_

18. What is 14% of \$320.00? \_\_\_\_\_

19. What is 90% of 500? \_\_\_\_\_

Solve the following equations. Show all work. (3 points each)

20.  $6x - 4 = 38$

21.  $4x + 10 = 9x - 5$

22.  $\frac{1}{x} = \frac{5}{15}$

23.  $\frac{20}{45} = \frac{x+3}{18}$

24.  $\frac{4}{x+3} = \frac{8}{x+9}$

25.  $\frac{x+1}{20} = \frac{x+5}{36}$

26.  $3(2x + 3) + 9 = 10(x + 1)$

27.  $4(6x + 7) + x - 4 = 5(4x + 12) + 9$