

LESSON 1, WARM-UP

- a. 30
- b. 44
- c. 63
- d. 15
- e. 35
- f. 18

Patterns

Final digits: 0, 2, 4, 6, 8

Not final digits: 1, 3, 5, 7, 9

LESSON 1, LESSON PRACTICE

- a. $5 + 6 = 11$
- b. $6 + 5 = 11$
- c. $8 + 0 = 8$
- d. $4 + 8 + 6 = 18$
- e. $4 + 5 + 6 = 15$
- f. Pattern: Some + some more = total
Problem: 5 laps + 8 laps = **13 laps**
- g. $2 + 4 = 6$
 $4 + 2 = 6$
- h. $1 + 3 + 5 = 9$,
 $1 + 5 + 3 = 9$,
 $3 + 1 + 5 = 9$,
 $3 + 5 + 1 = 9$,
 $5 + 1 + 3 = 9$,
 $5 + 3 + 1 = 9$
- i. Since $7 + 3 = 10$, $N = 3$
- j. Since $4 + 8 = 12$, $A = 4$

LESSON 1, MIXED PRACTICE

- 1. Pattern: $\begin{array}{r} \text{Some} \\ + \text{Some more} \\ \hline \text{Total} \end{array}$
Problem: $\begin{array}{r} 5 \text{ singers} \\ + 7 \text{ singers} \\ \hline 12 \text{ singers} \end{array}$
- 2. Pattern: Some + some more = total
Problem: 6 coins + 3 coins = **9 coins**
- 3. $9 + 4 = 13$
- 4. $8 + 2 = 10$
- 5. $\begin{array}{r} 4 \\ - 5 \\ \hline 9 \end{array}$
 $N = 5$
- 6. $\begin{array}{r} 3 \\ - 5 \\ \hline 8 \end{array}$
 $W = 3$
- 7. $\begin{array}{r} 6 \\ - 2 \\ \hline 8 \end{array}$
 $P = 2$
- 8. $\begin{array}{r} 0 \\ + 8 \\ \hline 8 \end{array}$
 $Q = 0$
- 9. $3 + 4 + 5 = 12$
- 10. $4 + 4 + 4 = 12$
- 11. $6 + 4 = 10$
 $R = 4$
- 12. $1 + 5 = 6$
 $X = 1$
- 13. $\begin{array}{r} 5 \\ 5 \\ + 5 \\ \hline 15 \end{array}$

SOLUTIONS

$$\begin{array}{r} 14. \quad 8 \\ \quad 0 \\ \quad + 7 \\ \hline \quad 15 \end{array}$$

$$\begin{array}{r} 15. \quad 6 \\ \quad 5 \\ \quad + 4 \\ \hline \quad 15 \end{array}$$

$$\begin{array}{r} 16. \quad 9 \\ \quad 9 \\ \quad + 9 \\ \hline \quad 27 \end{array}$$

$$\begin{array}{r} 17. \quad 1 \\ \quad 9 \\ \quad + 9 \\ \hline \quad 10 \end{array}$$

$M = 1$

$$\begin{array}{r} 18. \quad 9 \\ \quad 3 \\ \quad + 3 \\ \hline \quad 12 \end{array}$$

$F = 3$

$$\begin{array}{r} 19. \quad 5 \\ \quad 5 \\ \quad + 5 \\ \hline \quad 10 \end{array}$$

$Z = 5$

$$\begin{array}{r} 20. \quad 0 \\ \quad 3 \\ \quad + 3 \\ \hline \quad 3 \end{array}$$

$N = 3$

21. $3 + 2 + 5 + 4 + 6 = 20$

22. $2 + 2 + 2 + 2 + 2 + 2 + 2 = 14$

23. $6 + 3 = 9$ or $3 + 6 = 9$

24. One possibility: $4 + 5 + 2 = 11$

25. $2 + 3 + 4 = 9,$
 $2 + 4 + 3 = 9,$
 $3 + 2 + 4 = 9,$
 $3 + 4 + 2 = 9,$
 $4 + 2 + 3 = 9,$
 $4 + 3 + 2 = 9$

26. B. 7

LESSON 2, WARM-UP

a. 50

b. 36

c. 49

d. 17

e. 19

f. 73

Patterns

Final digits: **0, 5**

Numbers in both lists: **10, 20, 30, 40, 50,**
60, 70, 80, 90, 100

LESSON 2, LESSON PRACTICE

a. $10 + A = 17$
 $10 + 7 = 17$
 $A = 7$

b. $B + 11 = 12$
 $1 + 11 = 12$
 $B = 1$

c. $14 + C = 20$
 $14 + 6 = 20$
 $C = 6$

LESSON 2, MIXED PRACTICE

1. Pattern: Some + some more = total
Problem: 5 carrots + 6 carrots = **11 carrots**

2. Pattern: Some + some more = total
Problem: 7 miles + 4 miles = **11 miles**

3. $9 + 4 = 13$
 $N = 4$

4. $7 + 8 = 15$